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# Workforce Training Results 1998

*An Evaluation  
of Washington  
State's Workforce  
Training System*

# WORKFORCE TRAINING AND EDUCATION COORDINATING BOARD

## The Vision

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*The Workforce Training and Education Coordinating Board is Washington State's valued and trusted source of leadership for the workforce training and education system.*

## Mission Statement

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The Workforce Training and Education Coordinating Board's mission is to bring business, labor, and the public sector together to shape strategies to best meet the workforce training needs of all of Washington's students, workers, and employers in order to create and sustain a high-skill, high-wage economy.

To fulfill this mission, Board members and staff work together to:

- Advise the Governor and Legislature on workforce training and education policy.
- Promote a system of workforce training and education that responds to the lifelong learning needs of the current and future workforce.
- Advocate for the nonbaccalaureate training and education needs of workers and employers.
- Facilitate innovations in policy.
- Ensure system quality and accountability by evaluating results and supporting high standards and continuous improvement.

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# Workforce Training Results—1998

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*An Evaluation  
of Washington  
State's Workforce  
Training System*

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July 31, 1998

Dear Governor Locke, Members of the State Legislature, and Partners in the Workforce Training System:

I am proud to present to you *Workforce Training Results 1998* our second biennial evaluation of the state's workforce training system.

*Workforce Training Results 1998* analyzes the outcomes of nine of the state's largest training programs—accounting for 90 percent of public expenditures in the workforce training system. It also discusses training that employers provide to their employees and the barriers that prevent potential participants from receiving training.

The report answers such basic questions as: Do people get jobs after they finish training? What do the jobs pay? Are program participants satisfied with the training? Are their employers satisfied with the participants' skills?

I believe this is the most complete accounting of the results of any state's workforce training system.

Overall, *Workforce Training Results 1998* shows the following areas of strength and relatively weaker areas that should be improved:

### **Areas of Strength**

- In most programs, about 90 percent of participants were satisfied with the overall quality of their program; they were particularly pleased with the quality of instruction.
- In most programs, over 80 percent of participants find employment, and about three-quarters of those say their training was related to their job.
- In every program, at least half of the participants said their job-specific skills improved "a lot."
- Employment rates and earnings have increased from the results found two years ago.

**Areas that Should be Improved**

- Between 52 and 71 percent of employers, depending on the program, reported they were satisfied with the overall quality of former program participants. Areas of relatively low employer satisfaction were employees' computer skills and the general workplace skills of communications, problem solving, teamwork, and good work habits.
- The support services that most often need to be improved are information about job openings, career counseling, financial assistance, and child care.
- Women enter the programs earning substantially less than men, and after leaving the programs they still earned substantially less than men.
- Individuals who would likely benefit from training would be more likely to enter training if information were more widely available about financial assistance to attend a community or technical college and about other government training programs.
- Employers should do more to provide training to production and service workers, and to provide basic skills instruction to employees with low literacy and math skills.

By the end of this year, the Workforce Training and Education Coordinating Board will issue the update of "High Skills, High Wages: Washington's Comprehensive Plan for Workforce Training and Education." The update will include recommendations for the next steps to address these and other areas to improve the state's workforce training system.

I hope you find *Workforce Training Results 1998* a valuable product. At the end of the report you will find a customer satisfaction survey. I encourage you to complete the survey and let us know how we are doing. We will use the responses to continue to improve this biennial report.

Sincerely,

Betty Jane Narver, Chair  
Workforce Training and Education Coordinating Board

# Table of Contents

**Executive Summary** ..... i

**Introduction** ..... 1

**Programs for Adults**

    Community and Technical Colleges Job Preparatory Training ..... 5

    Private Career Schools ..... 15

    Apprenticeship ..... 25

    Job Training Partnership Act Title III for Dislocated Workers ..... 35

**Programs for Adults With Barriers to Employment**

    Adult Basic Skills Education ..... 47

    Job Training Partnership Act Title II-A for Adults ..... 57

**Programs for Youth**

    Secondary Vocational-Technical Education ..... 67

    Job Training Partnership Act Title II-C for Youth ..... 77

    Job Training Partnership Act Title II-B Summer Youth Program ..... 87

**Potential Training Participants** ..... 91

**Employer-Provided Training** ..... 93

**Appendix** ..... 101

    Customer Satisfaction Survey ..... 102

# Executive Summary

## Introduction

This is the second biennial outcome evaluation of Washington's workforce training system. It analyzes the results of nine of the state's largest workforce training and education programs plus employer-provided training. The programs account for 90 percent of public expenditures in the state training system.

The purpose of the evaluation is to report the results of workforce training and recommend areas for improvement. The report discusses the results of the programs in terms of the seven goals for the state training system established by the Workforce Training and Education Coordinating Board (WTECB). These goals are not static targets but conditions that should be increasingly true for all people.

1. **Competencies:** Washington's workforce possess the skills and abilities required in the workplace.
2. **Employment:** Washington's workforce finds employment opportunities.
3. **Earnings:** Washington's workforce achieves a family-wage standard of living from earned income.
4. **Productivity:** Washington's workforce is productive.
5. **Reduced Poverty:** Washington's workforce lives above poverty.
6. **Customer Satisfaction:** Workforce development participants and their employers are satisfied with workforce development services and results.
7. **Return on Investment:** Workforce development programs provide returns that exceed program costs.<sup>1</sup>

Findings are from the following sources of data:

- Program records on over 65,000 individuals who left one of these programs during the 1995–96 school year.<sup>2</sup>
- Mail survey responses from approximately 1,000 employers during the fall of 1997.
- Telephone survey responses from approximately 2,250 former 1995–96 participants during the fall of 1997 and December 1996.

<sup>1</sup> This last goal is the subject of a net-impact and cost-benefit evaluation conducted by WTECB every five years.

<sup>2</sup> For ease of exposition, the report refers to these individuals as the 1995–96 participants.

- Computer matches with Employment Security employment records.
- Computer matches with community and technical college enrollment records.
- Telephone survey responses from approximately 200 potential program participants (Employment Service registrants likely to need training, but who were not enrolled in any of the programs included in the study).

In addition to research by the staff of WTECB, research was conducted under contract to the Board by Washington State University's Social and Economic Survey Research Center, Battelle Memorial Institute, and Starling Associates.

It is important to note that, except for secondary vocational education, **the participant results presented in this report are for all participants, not just those who completed their program.** Participants are defined as individuals who entered a program and demonstrated the intent to complete a sequence of program activities. The results are, therefore, affected by the number of participants who left their program before completion.

Readers are also cautioned not to make improper comparisons among programs or between the previous evaluation based on 1993-94 participants and current evaluation results. Some evaluation methodologies were improved, and different programs serve different populations for different purposes.

## Program and Participant Characteristics

Figure 1 briefly describes the 9 programs included in this report.

The training programs are grouped into three clusters based on participant characteristics:

1. Programs Serving Adults.
2. Programs Serving Adults With Barriers to Employment.
3. Programs Serving Youth.

Throughout this report, results are grouped by these three clusters.

It is very important to consider the demographic characteristics of program participants. The single most important factor in determining program results is the characteristics of the individuals who entered the program. Programs serving participants who have significant work experience and basic skills can be expected to have higher labor market outcomes than those serving participants with little work experience and low levels of literacy.

## Programs Included in *Workforce Training Results – 1998*

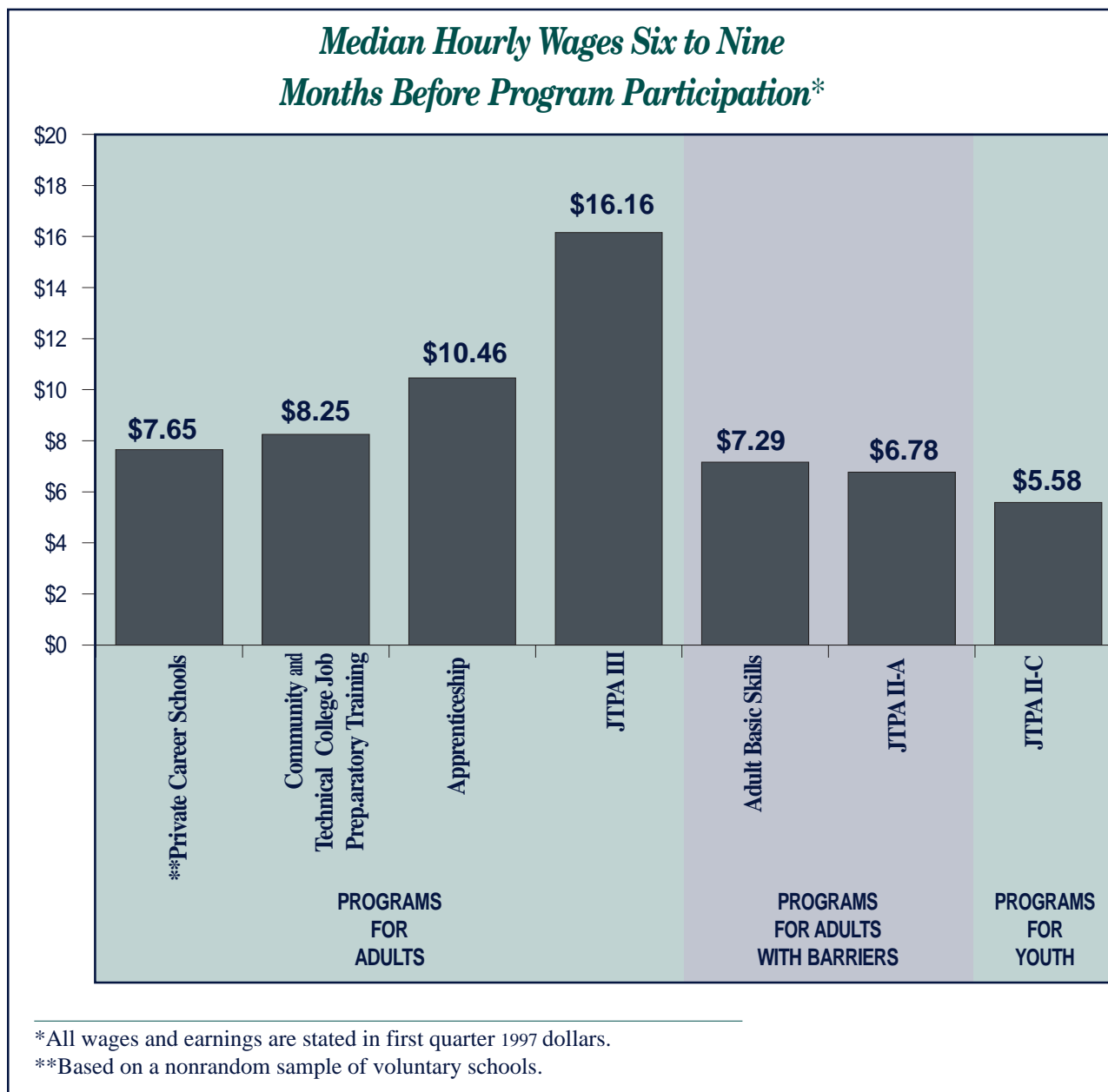
FIGURE 1

Programs Serving Adults	COMMUNITY & TECHNICAL COLLEGE JOB PREPARATORY TRAINING	<b>Training and education for a Vocational Associates Degree or a Vocational Certificate.</b> Also referred to as postsecondary vocational education, job preparatory training is the largest of the colleges' training programs. Job preparatory training does not include dislocated worker retraining or classes taken by current workers to upgrade skills for their current job, nor does it include the other two mission areas of the colleges—academic transfer education and basic skills instruction.
	PRIVATE CAREER SCHOOLS	<b>Training provided by private businesses for students intending to complete vocational certificates or degrees.</b> The schools are licensed by the Workforce Training and Education Coordinating Board or, if they grant a degree, by the Higher Education Coordinating Board. The Department of Licensing licenses cosmetology schools.
	APPRENTICESHIP	<b>Training that combines classroom instruction with paid, on-the-job training under the supervision of a journey-level craft person or trade professional.</b> Apprenticeships are governed by the Washington State Apprenticeship and Training Council and administered by the Department of Labor and Industries.
	JOB TRAINING PARTNERSHIP ACT TITLE III	<b>Federal employment and training program for dislocated workers.</b> The program is administered by the Employment Security Department (ES) at the state level and by 12 Service Delivery Areas (SDAs) at the local level, each headed by a Private Industry Council (PIC).
Programs Serving Adults With Barriers to Employment	ADULT BASIC SKILLS EDUCATION	<b>Literacy and math instruction for adults who are at a high school level or below.</b> Instruction includes courses in four categories: Adult Basic Education for adults whose skills are at or below the eighth grade level; English-as-a-Second Language; GED Test Preparation; and High School Completion for adults who want to earn an adult high school diploma. Instruction is provided by community and technical colleges and other organizations, such as libraries and community-based organizations, although the evaluation is limited to the colleges.
	JOB TRAINING PARTNERSHIP ACT TITLE II-A	<b>Federal employment and training program for low-income adults age 22 and older who experience significant barriers to school or employment.</b> The program is administered by ES at the state level and at the local level by 12 SDAs, each headed by a PIC.
Programs Serving Youth	SECONDARY VOCATIONAL-TECHNICAL EDUCATION	<b>Training and vocational education in high schools and vocational skills centers</b> in agriculture, family and consumer sciences, trade and industry, marketing, business, diversified occupations, community resources, technology, cosmetology, and health occupations.
	JOB TRAINING PARTNERSHIP ACT TITLE II-C	<b>Federal employment and training program for low-income youth 16–21 years old who experience significant barriers to school or employment.</b> The program is administered by ES at the state level and by 12 SDAs at the local level, each headed by a PIC.
	JOB TRAINING PARTNERSHIP ACT TITLE II-B	<b>Federal employment and training program for low-income youth 14–21 years old who experience significant barriers to school or employment.</b> The program provides employment for approximately eight weeks in the summer and remedial education. The program is administered by ES at the state level and by 12 SDAs at the local level, each headed by a PIC.

The preprogram wages of the participants is illustrative of the different economic situations of the three clusters of program participants. Most secondary vocational education students and Job Training Partnership Act (JTPA) II-B participants did not have reported

employment prior to entering their program. Among those who were employed three quarters prior to entering a program, the median wage was lowest for JTPA Title II-C participants and highest in the adult cluster. (See Figure 2.)

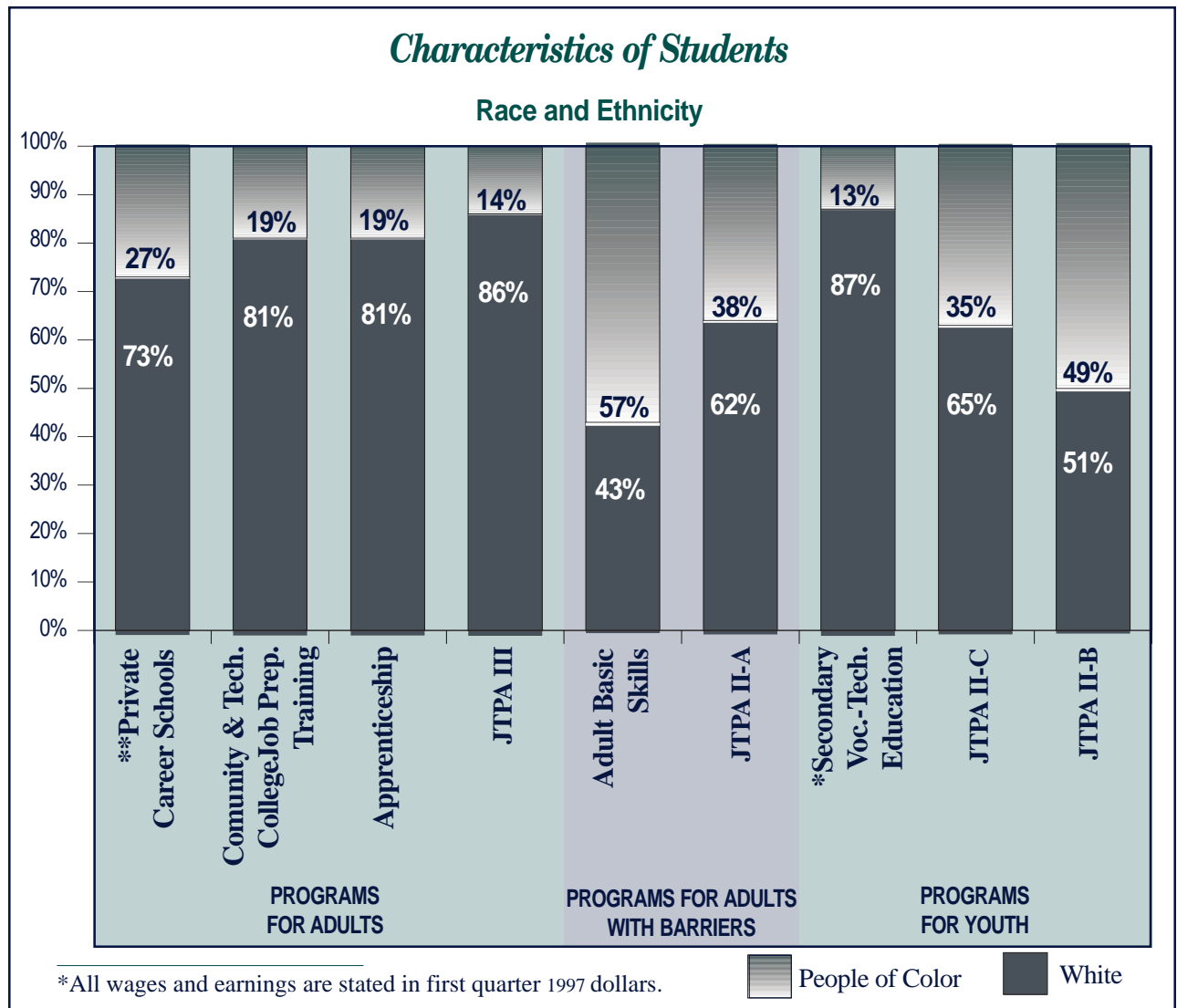
FIGURE 2



The racial and ethnic composition of participants in most programs was more diverse than the state's general population. Participants were most diverse in the cluster of programs serving adults with barriers to employment and in JTPA Titles II-B and II-C programs that target youth with barriers to employment. Also, the percentage of nonwhite participants in private vocational schools included in

the study was relatively high. (See Figure 3.) There was little change from the composition of 1993–94 participants studied by our previous evaluation. (There was a 13 percentage point increase in the percentage of secondary vocational education students who were white, but this may be associated with a difference in the schools that volunteered to take part in the study.)

FIGURE 3



## Program Results

### *Competency Gains*

**Goal:** *Washington State's workforce possess the skills and abilities required in the workplace.*

Among program participants who received job-specific skills training, almost all said their job-specific skills improved, and, in most cases, they said their skills improved a lot. Among participants who received job-specific skills training, between 50 and 74 percent, depending on the program, said their job-specific skills improved a lot. (See Figure 4.)

Not all program participants received job-specific skills training. Adult Basic Skills Education, by the definition used in the study, does not include vocational training and, therefore, is not included in the figure. JTPA programs offer a variety of job search assistance and basic skills instruction in addition to job-specific skills training. Between 19 and 33 percent of JTPA participants said they did not receive job-specific skills training before leaving their program. Also, the relatively low percentage of JTPA Title III participants who said their job-specific skills improved a lot may reflect the extensive skills already held by many dislocated workers before entering the program.

These findings are very similar to findings of the previous *Workforce Training Results*, except that there was an increase in the percentage of JTPA Titles II-A and II-C participants who reported that they received job-specific skills training.

There were some gender differences in the types of training received by participants. Men were more likely to report training in the use of machinery. Women were more likely to report training in the use of computers.

Another measure of whether training provided participants with the right kinds of skills is whether the former participants believed their training was related to their postprogram employment. In most cases, a large majority of program participants indicated their training was related to the job they held nine months after leaving the program. (See Figure 5.) (No comparable question was asked in the previous outcome evaluation.)

The two programs with relatively lower results for job-relatedness of training were JTPA Title III and Adult Basic Skills Education. JTPA Title III serves dislocated workers who often possess job skills. As noted earlier, the program frequently provides participants with employment services other than training. In the case of Adult Basic Skills Education, it may be more difficult for survey respondents to understand the relationship of basic skills instruction, as opposed to job-specific skills training, to their job. It also may be evidence of the need to more frequently provide adult basic skills instruction in a work context.

FIGURE 4

*Percentage of Participants Who Said  
Their Job-Specific Skills Improved a Lot or a Little*

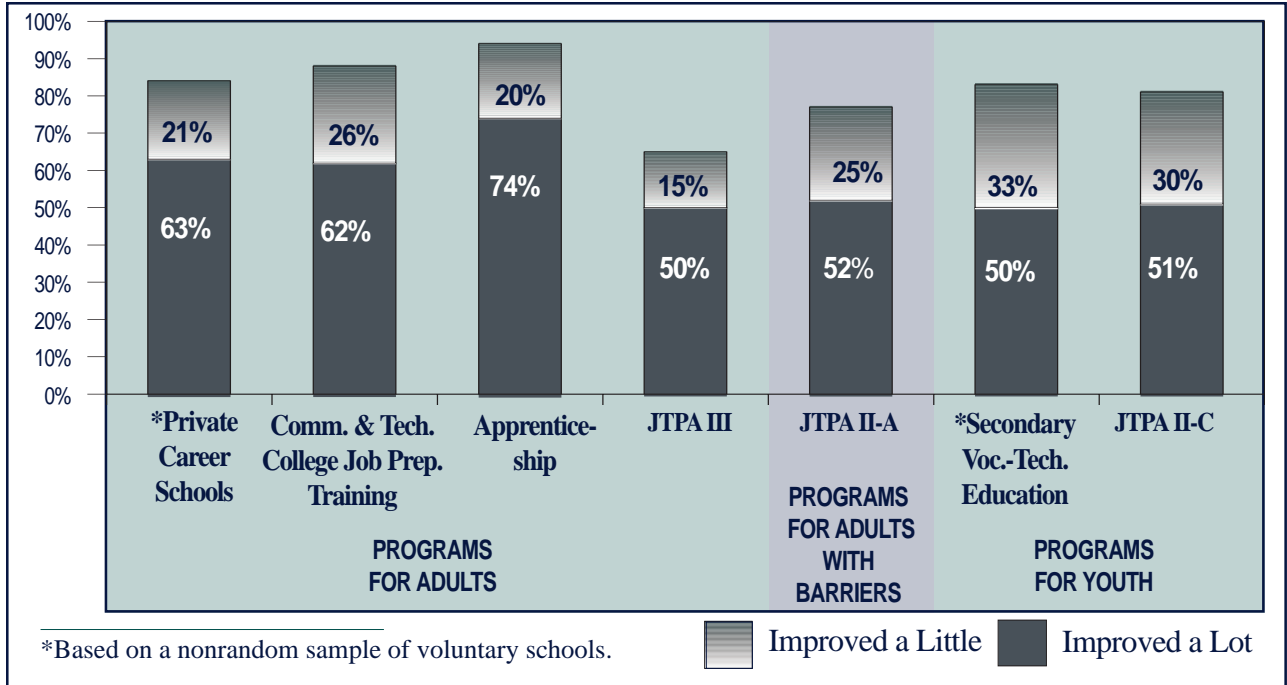
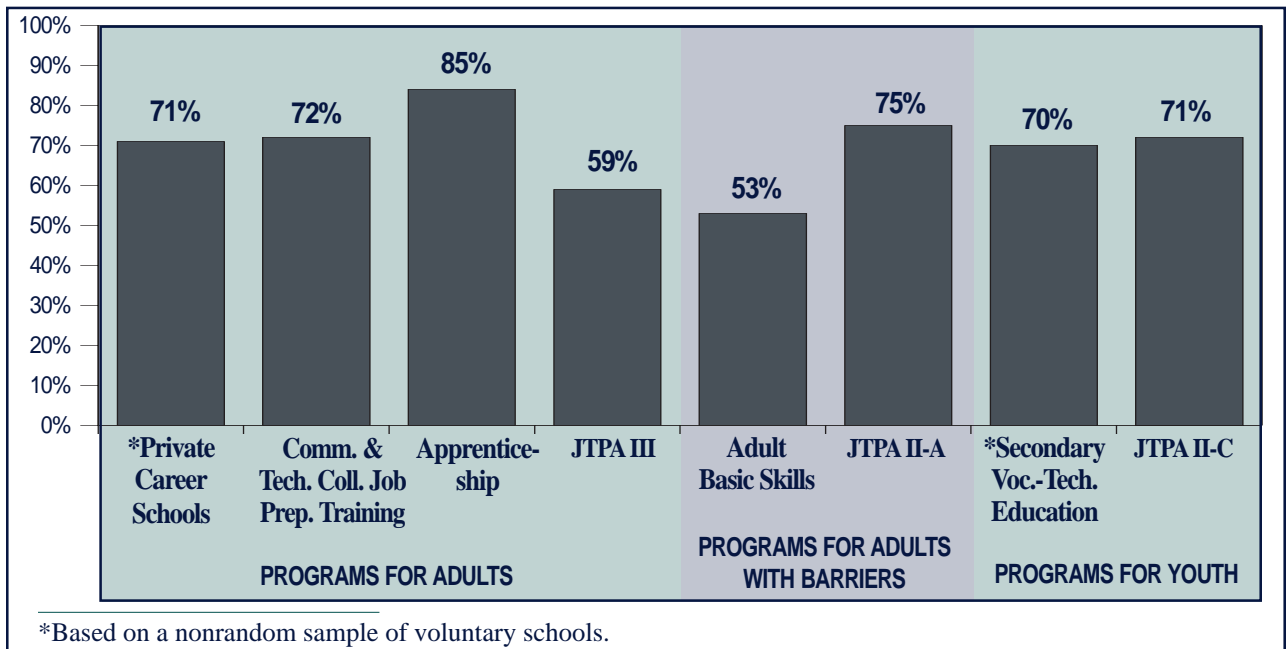


FIGURE 5

*Training Related to Employment*  
(percentage of employed former participants who said training was related to job held nine months after leaving program)



### ***Participant Satisfaction***

**Goal:** *Workforce development participants and their employers are satisfied with workforce development services and results.*

The vast majority of participants were satisfied with the overall quality of their program. No fewer than 77 percent of participants were satisfied with the overall quality of any program included in the study. (See Figure 6.)

Participants were generally most satisfied with the quality of their program's instructors. The aspects of programs that seem to have the lowest participant satisfaction were support services, especially information about job openings. Participant satisfaction was also relatively low with career counseling, financial assistance, and child care. Participants were generally satisfied with the support services they received, but many did not receive the services they needed.

Participant satisfaction results are very similar to the findings of the previous *Workforce Training Results*. However, fewer participants reported the need for support services related to job placement than two years ago. This change may be due to improvement in the economy.

### ***Employer Satisfaction***

**Goal:** *Workforce development participants and their employers are satisfied with workforce development services and results.*

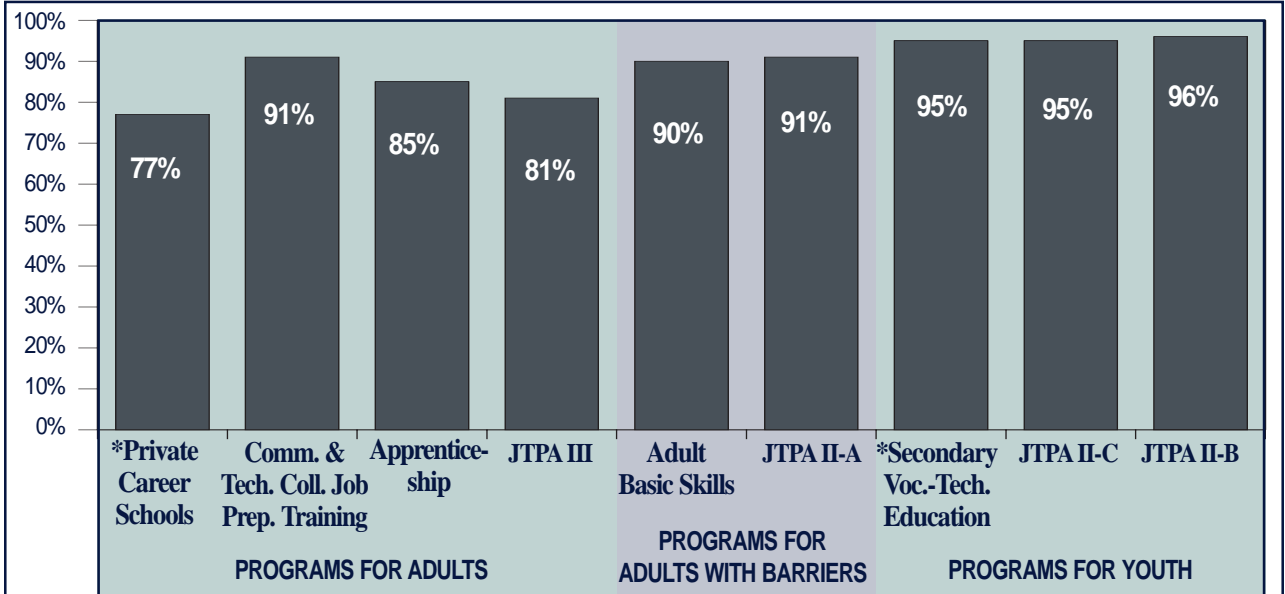
A majority of employers reported they were satisfied with the overall quality of the work performed by new employees who had recently completed one of these programs. The extent of satisfaction, however, was not as high as one would like. Between 52 and 71 percent of employers, depending on the program, reported they were satisfied with the overall quality of work by these new employees. (See Figure 7.)<sup>3</sup>

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<sup>3</sup> These employer satisfaction survey responses are not comparable between the 1995 and 1997 surveys because of a change in the response scale. The 1995 survey asked employers if they were very satisfied, somewhat satisfied, or very dissatisfied. The 1997 survey asked employers if they were very satisfied, somewhat satisfied, somewhat dissatisfied, or very dissatisfied. Moving to a four-point response scale would, by itself, tend to lower the percentage reporting some degree of satisfaction.

*Percentage of Participants Satisfied  
With Overall Quality of Their Program*

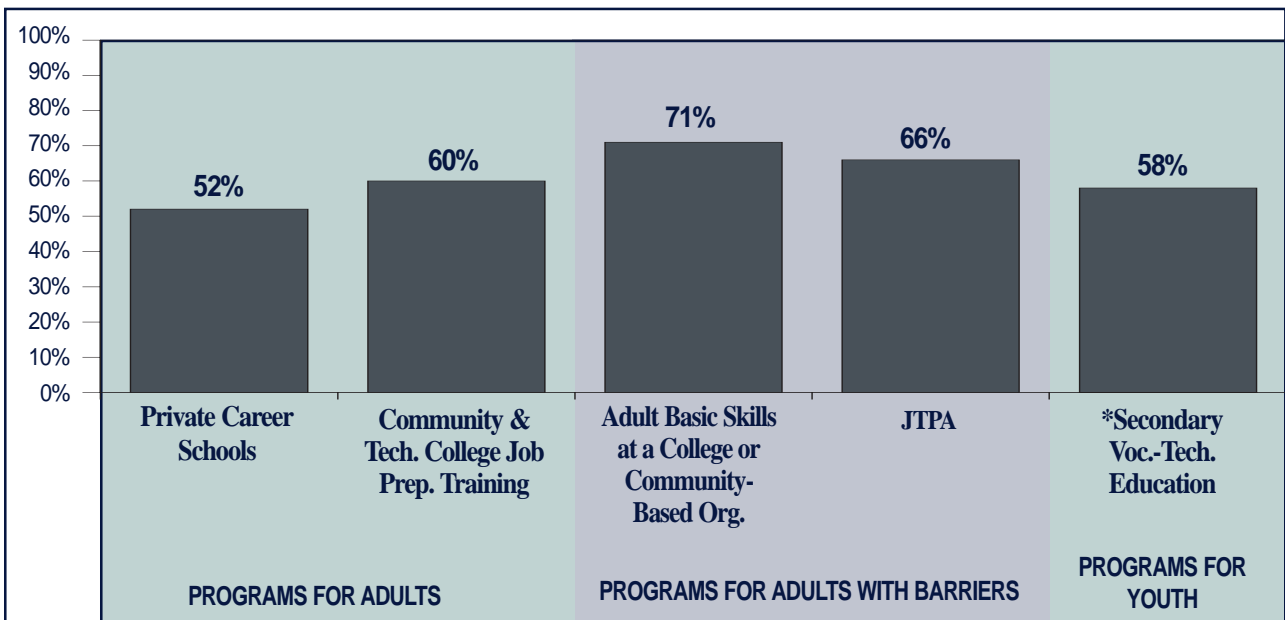
FIGURE 6



\*Based on a nonrandom sample of voluntary schools.

*Percentage of Employers Satisfied With the  
Overall Quality of Work Performed by New Employees  
Who Recently Completed the Program*

FIGURE 7



Employers were most satisfied with the productivity and basic skills of new employees who had recently completed one of these programs. Employers were least satisfied with the communication, computer, and general workplace skills of these employees, such as the ability to solve problems, work habits, and teamwork. The previous employer survey found employer satisfaction to be relatively lower with computer, problem solving, and math skills.

### ***Employment***

***Goal:*** Washington's workforce finds employment opportunities.

In most cases, 80 percent or more of the program participants reported having a job during the third quarter (6 to 9 months) after they left their program. The exceptions to this general result were Adult Basic Skills Education and JTPA Title II-C. (See Figure 8.)

The employment rates are typical of the national employment rates for individuals with such educational attainments. For example, nationwide 83 percent of individuals with a two-year college degree are employed.

JTPA Title II-C serves economically disadvantaged youth and typically provides five months of service. Median participation in Adult Basic Skills Education was between three and six months, and the study was limited to students who did not also participate in college vocational training. Our earlier net-impact evaluation

and studies by others have shown that adult basic skills instruction that is not coupled with vocational training does not typically improve employment results.

Across most programs, the current study found slightly higher employment rates (1 to 4 percentage points higher based on the Employment Security Department records) than were found two years earlier in the previous *Workforce Training Results*. This may reflect the better job market of 1997.

### ***Earnings***

***Goal:*** Washington's workforce achieves a family-wage standard of living from earned income.

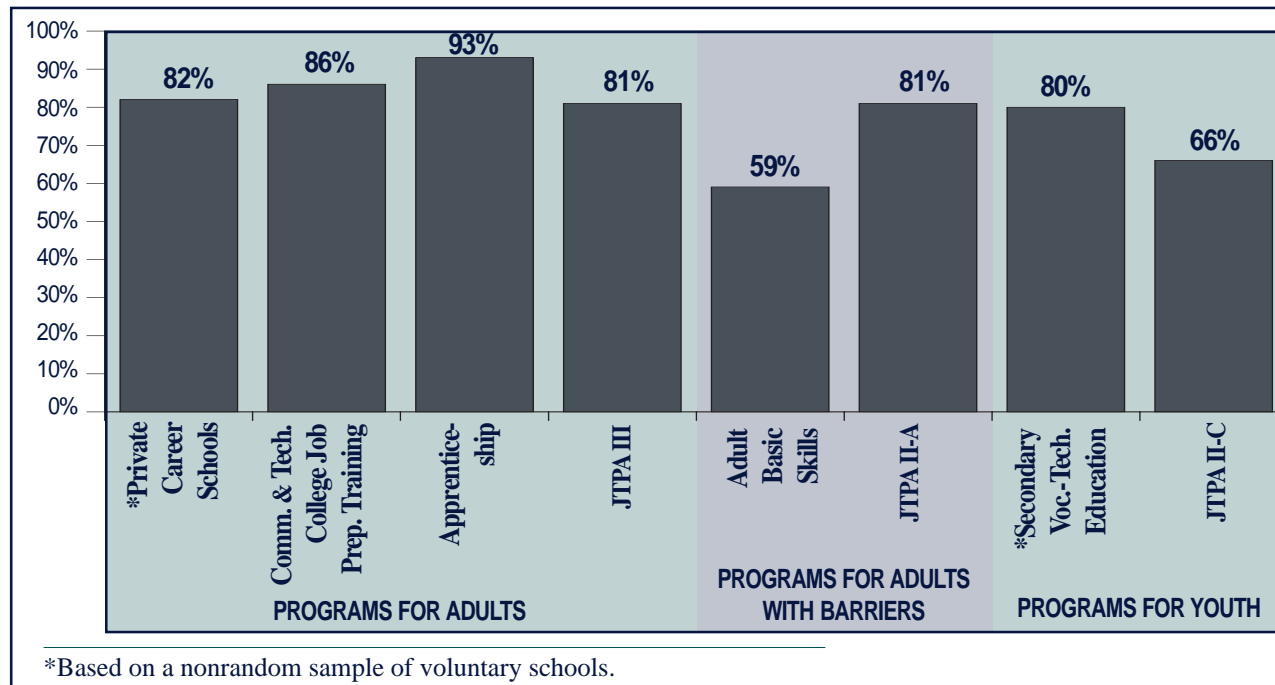
Postprogram earnings are very much affected by the characteristics of the participants who entered the program. Participants in programs serving youth had the lowest postprogram hourly wages and quarterly earnings, and participants in programs serving adults had the highest postprogram wages and earnings.<sup>4</sup> (See Figure 9.)

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<sup>4</sup>Earnings equal wage times the number of hours of work. It is not valid methodologically to subtract the wage levels in Figure 2 from those in Figure 9 to obtain a measure of pre-post change in hourly wages.

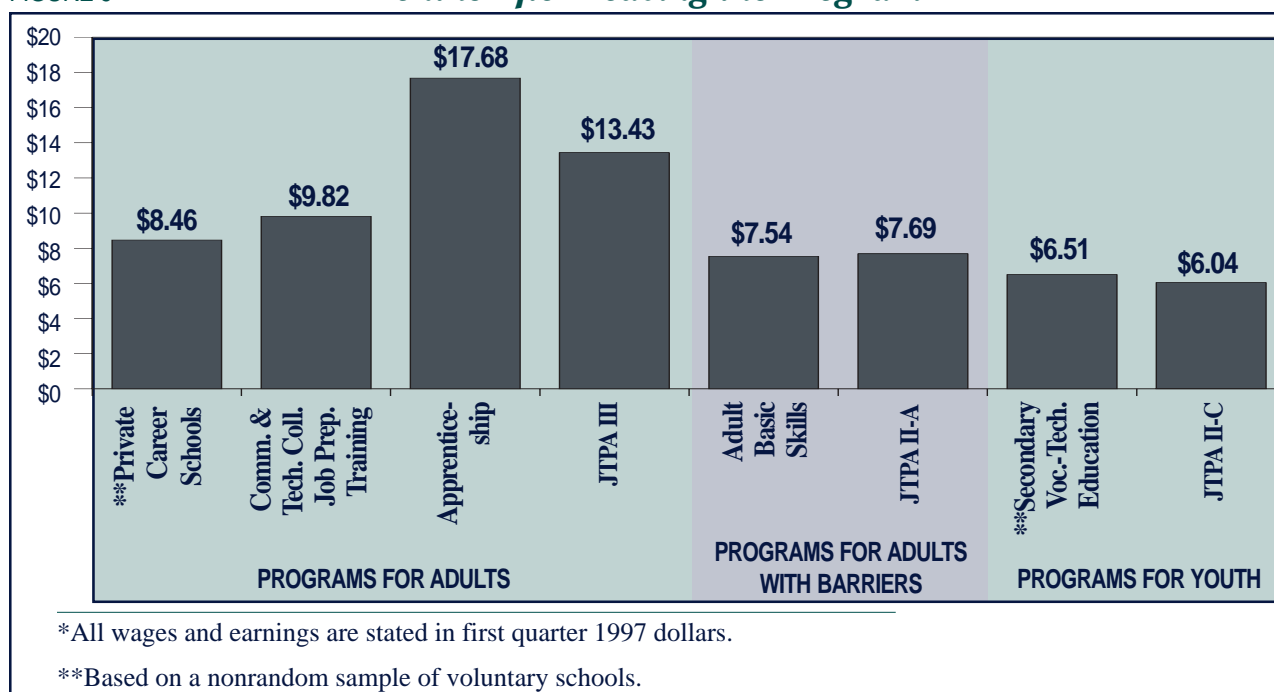
***Percentage of Participants Reporting Employment  
Six to Nine Months After Leaving Their Program***

FIGURE 8



***Median Hourly Wage Six to Nine  
Months After Leaving the Program\****

FIGURE 9



Earnings and hourly wages were particularly high for individuals who participated in apprenticeship. In addition to the quality of the program, this finding reflects the length of the training, the prior earnings of participants, and the labor market in their occupations and industries. JTPA Title III participants also had relatively high earnings and wages. This reflects the greater job experience of the program's participants.

In most programs, hourly wages and quarterly earnings were slightly higher, even after controlling for inflation, than were found two years ago in the previous *Workforce Training Results*. The one program with a very large increase in wages and earnings was JTPA Title III. This may be due, at least in part, to a large increase in participants coming from and going back to the aerospace industry.

For most programs, postprogram earnings and hourly wages were lower for women than for men who participated in the same program. Racial and ethnic differences varied considerably among programs, although for many programs wages and earnings tended to be lower for Native Americans. These differences in postprogram wages and earnings by gender and race/ethnicity generally reflected differences in wages and earnings prior to program enrollment and gender and race/ethnicity differences in the overall labor market.

## Employer-Provided Training

Training that employers offer or support for their own employees is a major part of the training that occurs in the state (and is defined in statute as part of the state training system). WTECB estimates that employer expenditures on training are roughly equivalent to the amount of public expenditures on workforce development. Based on our 1997 survey of Washington employers, most employers provided or paid for at least some training for their own employees. Almost all employers, 94 percent, said they provided at least some on-the-job training to employees, and 71 percent said they provided at least 4 hours of classroom training in the previous 12 months.

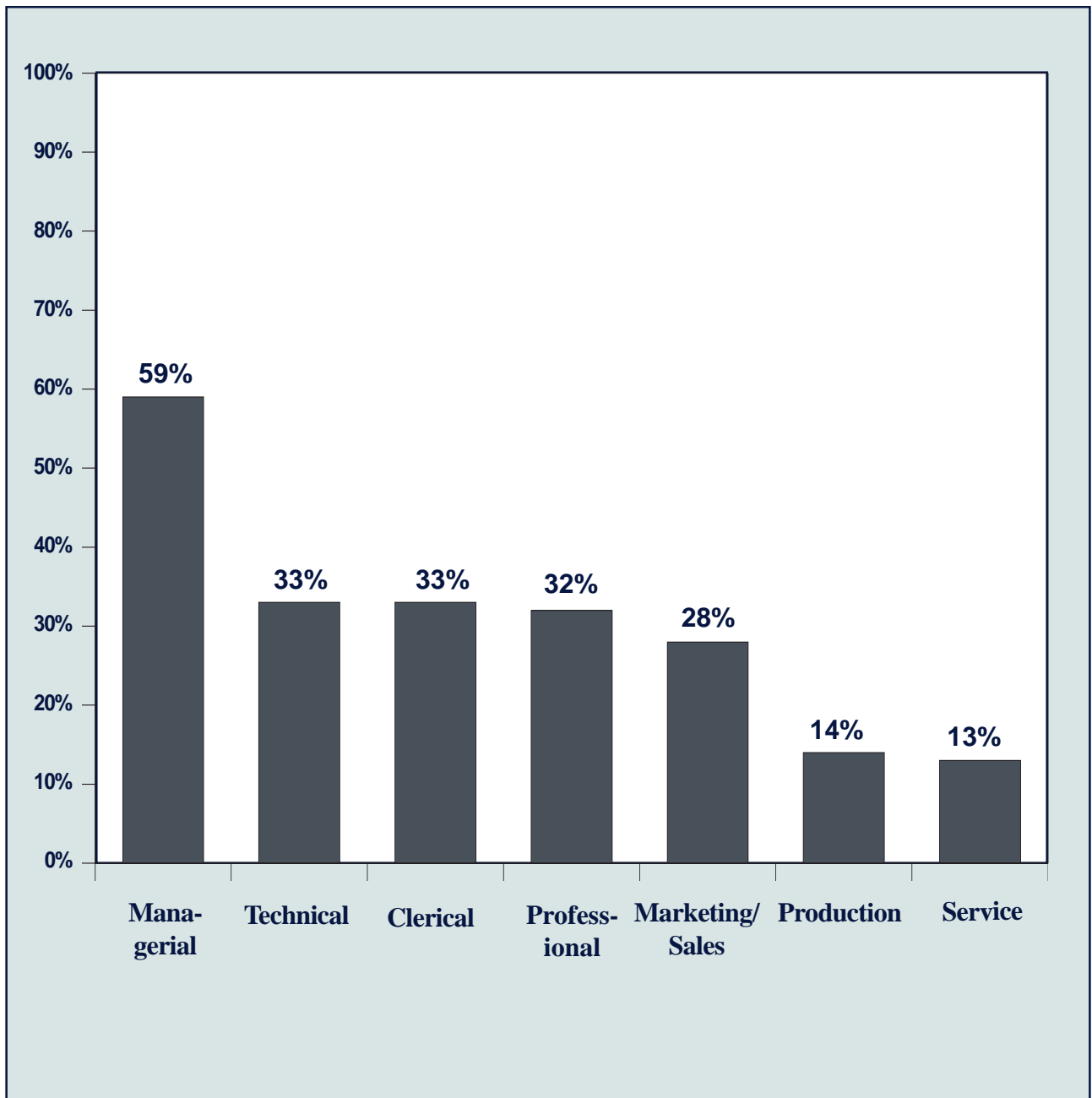
The extent of training has been increasing. Fifty-three percent of employers said that in the last three years they have increased the percentage of employees to or for whom they provided classroom training.

Employer-provided classroom training is heavily skewed toward training managerial employees as opposed to production or service workers. (See Figure 10.) The average response of employers was that they provided classroom training to 59 percent of their managers and to just 14 and 13 percent, respectively, of their production and service workers.

## *Percentage of Employees Who Received Employer-Provided Training*

(mean employer estimate; at least 4 classroom  
hours in the last 12 months)

FIGURE 10



Employers seldom provide basic skills instruction to their employees. Only 10 percent of employers reported they provided even 4 hours of instruction in reading, writing, or math to any employees in the last 12 months. (See Figure 11.)

In order to provide their current workers with training, even classroom training, employers usually turned to their own personnel or to private training contractors. Few employers used public providers of training. (See Figure 12.)

Among the relatively few employers who used a public community or technical college for training for their current workers, almost all were satisfied with the training. Sixty-two percent of employers who used a community or technical college to provide job-specific training responded they were very satisfied, and 36 percent said were somewhat satisfied with the training.

These results are similar to the findings from our previous 1995 survey of employers, although there were some changes.

In 1997, 11 percent more employers said they provided some classroom training to their employees than said so in 1995. In 1997, however, employers reported they provided classroom training to fewer of their production and service workers. Also in 1997, employers even more frequently said they used their own personnel to train their workers. (The previous survey did

not ask about satisfaction with community and technical college training for current workers.)

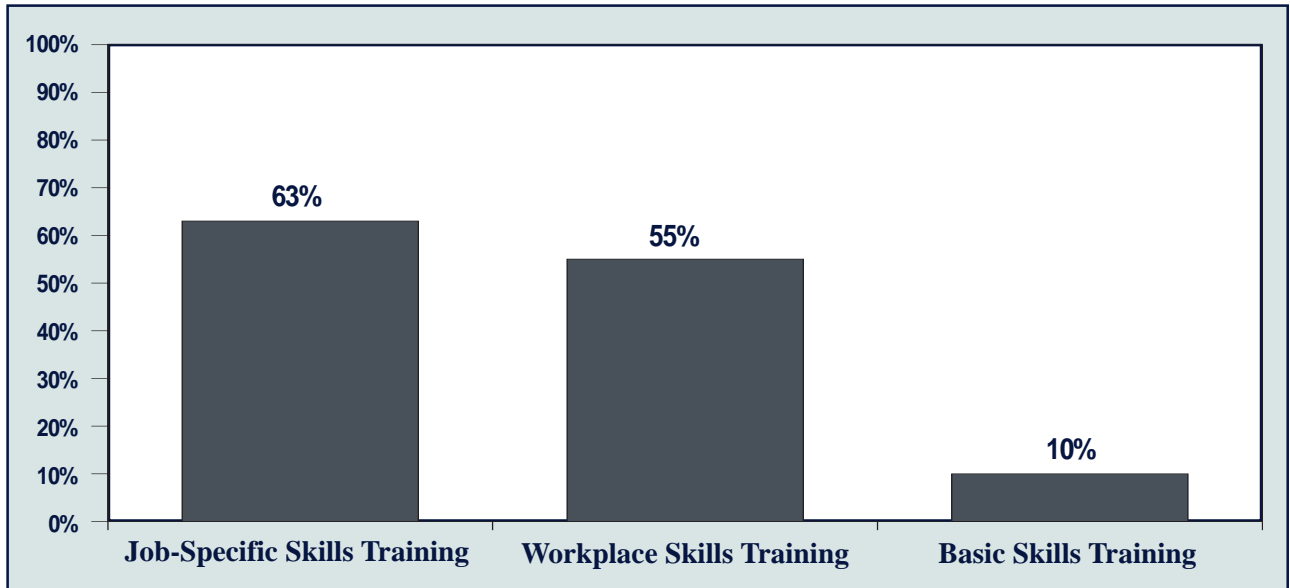
## **Areas of Strength and Areas for Improvement**

Based on these findings, several areas stand out as areas of strength across the training system. Participant satisfaction was generally quite high. Participants were especially satisfied with the quality of their instructors. There was an increase from two years ago in the percentage of participants who said they received job-specific skills training. The majority of participants who received job-specific skills training, said that their skills improved a lot. A large majority of participants who received support services, said their needs were met. For most programs, at least 70 percent of participants who were employed after their training said their training was related to their job. Employment rates and earnings were, for the most part, a little higher than found by our previous evaluation of 1993–94 participants.

### *Percentage of Employers Providing Classroom Training to any Employees*

(at least 4 hours in the last 12 months)

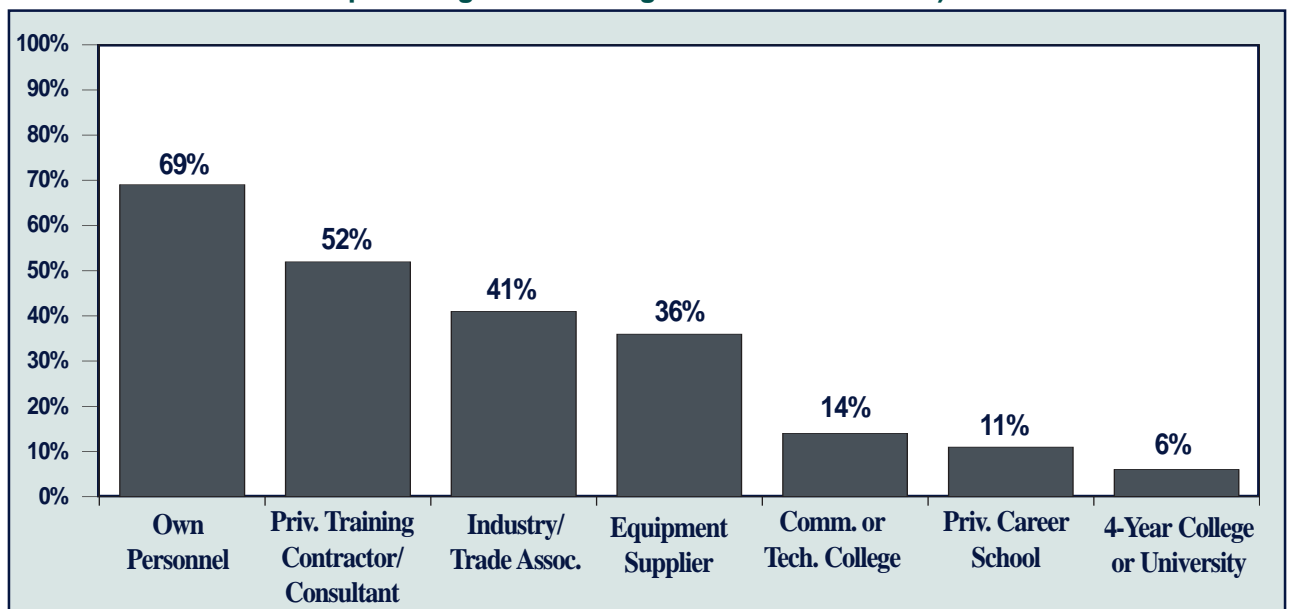
FIGURE 11



### *Percentage of Employers Who Used Providers of Job-Specific Classroom Training*

(mean employer response among employers providing such training in the last 12 months)

FIGURE 12



Across the training system, there are other areas that are relatively weaker and should be targeted for improvement. (See Figure 13.) **The skill areas that most often need to be improved are communication skills, computer skills, and the general workplace skills of problem solving, teamwork, and good work habits.** Most programs serving youth and adults with barriers to employment also need to improve basic skills in reading, writing, and math. Improvement in these skill areas would increase employer satisfaction with program completers.

**The support services that most often need to be improved are information about job openings, career counseling, financial assistance, and child care.** In most cases, access is the issue rather than the quality of service that is provided.

Most programs also have more work to do if they are to eliminate gender differences in labor market outcomes. **Prior to enrolling in their program, most women had lower wages and earnings than did men who enrolled in the same program. After leaving their program, most women were still paid less than men who had participated in the same program.** Such gender differences, however, do exist in the overall labor market.

In addition to these program findings, our survey of potential training participants shows that **more individuals who need training might participate if information about**

**training programs was more widely available,** especially information about financial assistance to attend college and the availability of JTPA and other government programs. Also, more potential participants would likely attend a community or technical college if more classes were held at convenient times for working adults.

Finally, training provided by employers to their own employees is also an important part of the training system in the state. The evaluation finds that **employers should do more to provide training to production and service workers and to provide basic skills instruction to employees with low literacy and math skills.**

## *Areas for Improvement*

**The following charts summarize the aspects of each program that are relatively weaker than other aspects of the same program.**

FIGURE 13

Programs for Adults			
COLLEGE TRAINING	PRIVATE CAREER SCHOOLS	APPRENTICESHIP	JTPA TITLE III
Computer skills Communications General workplace skills Support service access Gender differences Native Americans	General workplace skills Communications Support services access	Math skills General workplace skills Gender differences Minority groups retention	Information about job openings Career counseling

Programs for Adults With Barriers to Employment	
ADULT BASIC SKILLS EDUCATION	JOB TRAINING PARTNERSHIP ACT TITLE II-A
Basic skills Communications skills General workplace skills Relatedness to work Computer skills Support service access Gender differences Native Americans	Basic skills Communication skills General workplace skills Computer skills Targeting higher paying occupations Information about job openings Gender differences

Programs for Youth		
SECONDARY VOCATIONAL-TECHNICAL EDUCATION	JTPA TITLE II-B	JTPA TITLE II-C
OSPI data collection Computer skills Communication skills Problem solving Work habits Information about job openings Gender differences	Connection between summer and school year education Connection between learning at work and in the classroom	Basic skills Communication skills Information about job openings Targeting higher paying jobs Gender differences

# Introduction

This is the second biennial outcome evaluation of Washington's workforce training system. The purpose of the evaluation is to analyze the results of workforce training and to recommend areas for improvement.

The state training system focuses on education and training for jobs that do not require a bachelor degree. While baccalaureate and graduate education is a very important part of preparing the labor force, the Workforce Training and Education Coordinating Board was created to emphasize training and education for jobs that do not require a baccalaureate degree. As the state Legislature wrote in the Board's authorizing statutes, "We must make certain that our institutions of education place appropriate emphasis on the needs of employers and on the needs of the approximately 80 percent of our young people who enter the world of work without completing a four-year program of higher education."

In evaluating the state workforce training system, the study analyzed nine of the largest training programs. These programs account for approximately 90 percent of public expenditures in the state training system.

The report groups the nine programs into three clusters based on participant characteristics. The single most important factor in determining program

results is the characteristics of the individuals who enter the program. That is, programs serving participants who have significant work experience and basic skills can be expected to have higher labor market outcomes than those serving participants with little work experience and low levels of literacy.

<i><b>The Three Clusters</b></i>	<i><b>The Nine Programs</b></i>
<b>PROGRAMS THAT SERVE ADULTS</b>	Community and Technical College Job Preparatory Training  Private Career Schools  Apprenticeship  Job Training Partnership Act Title III
<b>PROGRAMS THAT SERVE ADULTS WITH BARRIERS TO EMPLOYMENT</b>	Adult Basic Skills Education  Job Training Partnership Act Title II-A
<b>PROGRAMS THAT SERVE YOUTH</b>	Secondary Vocational Education  Job Training Partnership Act Title II-B  Job Training Partnership Act Title II-C

In addition to the nine programs, the report also analyzes employer-provided training—a critical part of training in the state. And, in order to study barriers to training, the report examines potential training participants who would likely benefit from training but did not take part in one of the programs included in the study.

Because the programs described offer different types of services to distinct populations of participants for specific purposes, simple comparisons across programs can be very misleading. Differences in program outcomes are heavily influenced not only by the customers served but also by the length, intensity, objectives, and costs of the program. Readers are also cautioned not to make improper comparisons between the current report and our previous evaluations based on participants who left training during 1993–94. The evaluation methodology has been improved and differs somewhat from earlier publications.

The report discusses the results of the program in terms of the seven goals for the workforce development system established by WTECB. These goals are not static targets but conditions that should be increasingly true for all people:

1. **Competencies:** Washington’s workforce possess the skills and abilities required in the workplace.
2. **Employment:** Washington’s workforce finds employment opportunities.
3. **Earnings:** Washington’s workforce achieves a family-wage standard of living from earned income.
4. **Productivity:** Washington’s workforce is productive.
5. **Reduced Poverty:** Washington’s workforce lives above poverty.
6. **Customer Satisfaction:** Workforce development participants and their employers are satisfied with workforce development services and results.
7. **Return on Investment:** Workforce development programs provide returns that exceed program costs.<sup>5</sup>

## Methodology

The group of participants studied were those who completed or otherwise left one of the nine programs during the 1995–96 school year (July 1, 1995 to June 30, 1996).<sup>6</sup> The study includes those who left without completing a program. Some of the participants had only a short exposure to program activities.

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<sup>5</sup> This last goal is the subject of a net-impact and cost-benefit evaluation conducted by WTECB every five years.

<sup>6</sup> For ease of exposition, the report uses the term “1995–96 participants” to refer to this group of participants.

The only exception is secondary vocational-technical education. Due to difficulties in identifying participants who did not complete the program, the evaluation includes only those who completed a secondary vocational sequence.

The evaluation includes findings from the following data sources:

- Participant program records on over 65,000 individuals who left one of the nine programs during the 1995–96 school year.
- A mail survey of approximately 1,000 Washington employers with 5 or more employees. (See the Appendix for the survey questions.)
- Telephone surveys of approximately 2,250 former program participants conducted in the fall of 1997 approximately 12 to 24 months after they left their program.<sup>7</sup> (See the Appendix for survey questions.)
- Computer matches with program participant quarterly Employment Security Department wage records from 1991 through the middle of 1997.
- Computer matches with community and technical college enrollment records for the 1995–96 and 1996–97 school years.
- A telephone survey of approximately 200 potential program participants—individuals who did not have a

baccalaureate degree and who registered with the Washington State Employment Service during the 1995–96 year.

WTECB staff conducted the research with the assistance of several contracting organizations. The Social and Economic Survey Research Center at Washington State University conducted the participant telephone surveys; Battelle Memorial Institute conducted the mail survey of employers; and Starling Consulting, Inc. (an Olympia-based software firm) constructed the participant database and assisted in writing this report.

The employer survey asked firms about their hiring experience, their employment and training needs, their in-house training and related practices, and their experiences with training programs and with employees who had received training through the programs.

Participant surveys asked individuals about their training program experiences, their employment and other postprogram experiences, other training they may have received, and demographic background information. The potential participant survey asked individuals about their employment experiences, their training needs, and about possible barriers to meeting those needs.

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<sup>7</sup>For the JTPA Summer Youth program, the survey was conducted in the fall of 1996.

The Employment Security wage record matches provided valuable data on the employment and earnings of former program participants working in jobs covered by unemployment insurance (approximately 85 to 90 percent of all employment in the state). The match with two-year college student records offered information on whether former program participants later enrolled in a community or technical college. In all data matches, great care was taken not to jeopardize individual confidentiality. While Employment Security wage records do not include all employment, compared to survey responses, they more accurately provide data on earnings and hours worked in a quarter. All earnings and hourly wages were adjusted for inflation and stated in first quarter of 1997 values.

The employer survey sample was selected to accurately represent the population of Washington State's employers with five or more employees. (Employers with fewer than five employees would be unlikely to have a sufficient variety of experiences with the training system to answer many of the survey questions.) Certain categories of employers were over-sampled to secure sufficient responses from which we could extrapolate meaningful results. In reporting the data, the responses were then weighted to resemble the actual population of employers. Unless otherwise stated, all employer percentages reported here have been weighted to reflect the state population of employers with five or more employees.

We used random sampling to determine who would be contacted for participant surveys. For secondary vocational-technical education and private career schools, however, the participants studied are not a random or statistically representative sample of all such participants in the state. In both cases, participant data are not centrally maintained, and only those school districts or career schools that voluntarily supplied data could be included. The participant data in this report for those two programs are statistically meaningful only for the group of institutions that supplied the requested data. The employer satisfaction data, however, is not limited in this way and is applicable generally to high school vocational programs and private career schools in Washington.

This report presents the major findings of the research. The research was conducted in a manner that permits further analysis of the data. For example, some employer survey results can be analyzed by industrial sector. As resources allow, we will be preparing additional analyses of these data. Those interested in such breakdowns of the data should contact WTECB in order to determine availability.

# Community and Technical Colleges Job Preparatory Training

Job preparatory training is provided by 32 community and technical colleges throughout the state. In general, this type of training provides students with the skills and abilities required for specific occupations. Upon completion, students receive a vocational certificate or degree. Job preparatory training, also referred to here as vocational education or simply training, does not include the dislocated worker retraining program, students who intend to transfer to a four-year college or university, or students who enroll in a program to raise their basic skills to a high school level. Also not included are students who identified their purpose for attending courses as augmenting skills for current jobs.

Information was obtained for the study on 25,864 vocational students who completed or otherwise left a community or technical college during the 1995–96 school year.<sup>8</sup> Of these students, 9,916 received a vocational certificate or degree, and the remaining 15,948

discontinued their studies without receiving a vocational credential. The median enrollment was six quarters for all students and nine quarters for those completing a certificate or degree.

The study includes information from students' college enrollment records and the state's Employment Security Department wage files. In addition, 208 of the students completed a telephone survey during the fall of 1997, providing additional data on employment and satisfaction with the training.

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<sup>8</sup> Our previous evaluations of community and technical colleges did not include participants who left training without either completing a program or completing ten vocational credits. In order to present comparable data with other programs, this year we included noncompleters who earned less than ten credits.

## Participant Characteristics

The college training students included higher proportionate numbers of African-Americans and Asian/Pacific Islanders than the state adult population as a whole. (See Figure 1.) They also included proportionately fewer Hispanics and Whites. Women made up 57 percent of the students; men 42 percent.

Community and technical college training serves a largely posthigh school population. At the time of enrollment, 55 percent had not previously attended college, 24 percent had attended college without receiving a credential, and the

remaining 20 percent had a certificate or degree, including 8 percent with baccalaureate degrees. One quarter of the students were in their early 20s, with 61 percent under the age of 35, and only 16 percent over the age of 45.

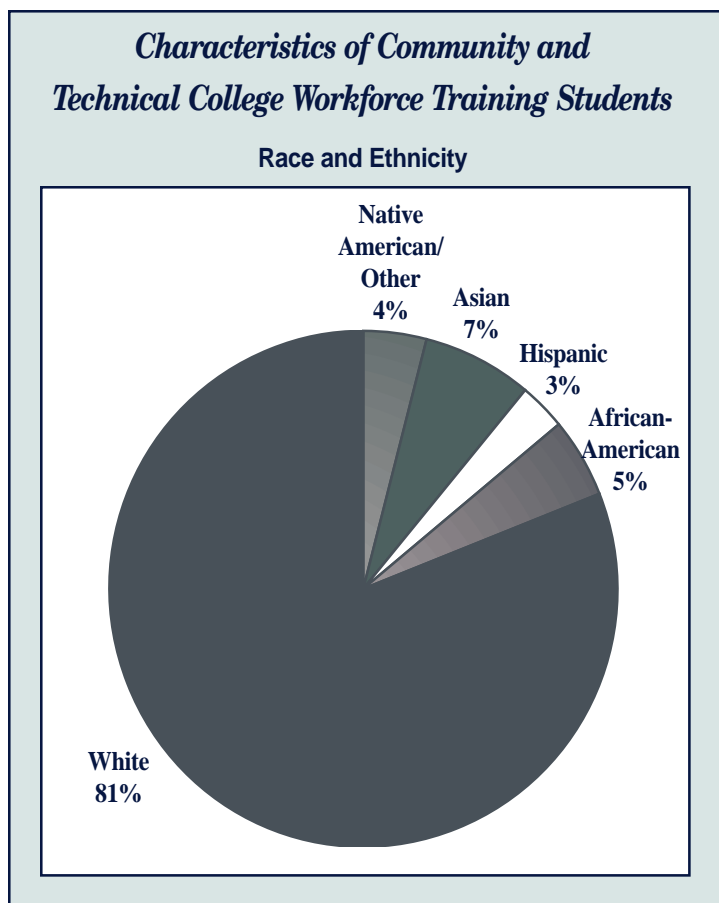
Nearly half (48 percent) of the students had employment reported to the Employment Security Department in the third quarter before enrolling in college. Their median hourly wage at this time was \$8.25 per hour, and they worked a median 391 quarterly hours, resulting in total quarterly earnings of \$2,986.

## Competency Gains

The primary goal of workforce training and education is to provide individuals with the skills and abilities required in the workplace. College vocational students mirrored this goal in their survey responses: the most common reason vocational students cited for enrolling in college was to get skills for a new job (81 percent), followed by those wanting to finish a degree (77 percent).

Based on survey results, 88 percent of the students received training in specific job skills, and 70 percent of those reported these skills improved a lot. (See Figures 2 and 3.) Between 47 and 69 percent received education or training in math, teamwork, work habits, problem solving, writing, and computer skills. Between 42 and 61 percent who received training in these areas said their skills improved a lot, while only 3 to 11 percent reported their skills did not improve at all (the remainder said their skills improved a little).

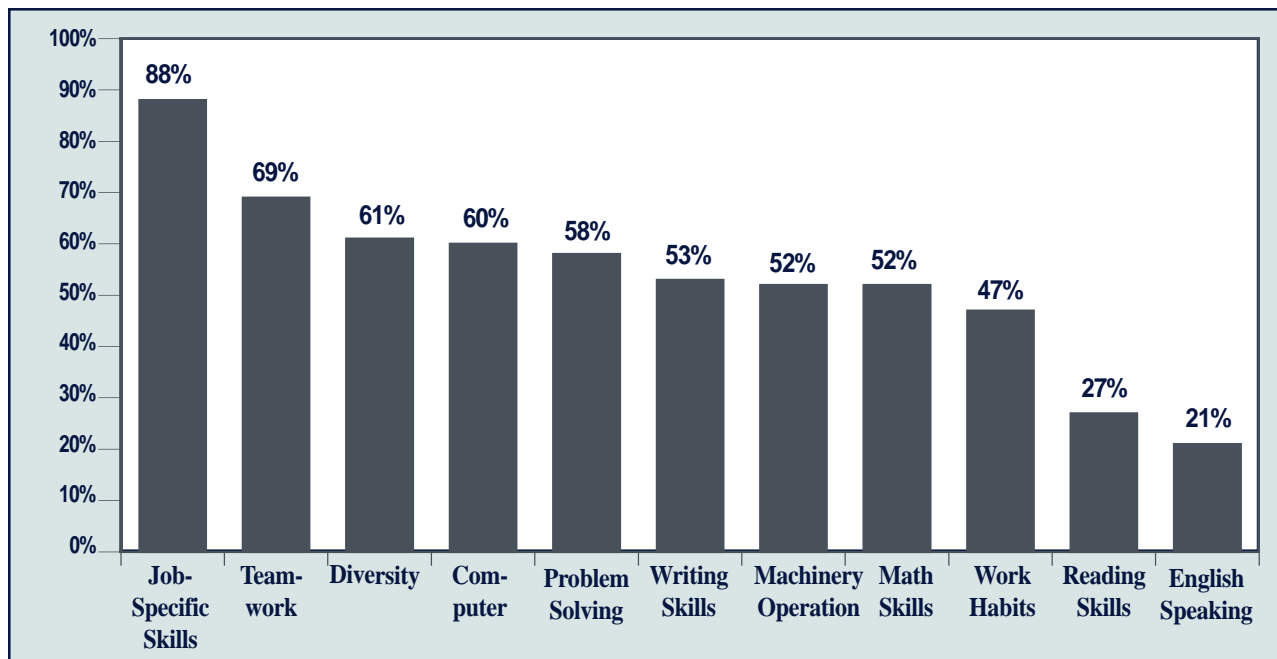
FIGURE 1



## Training of Community and Technical College Students

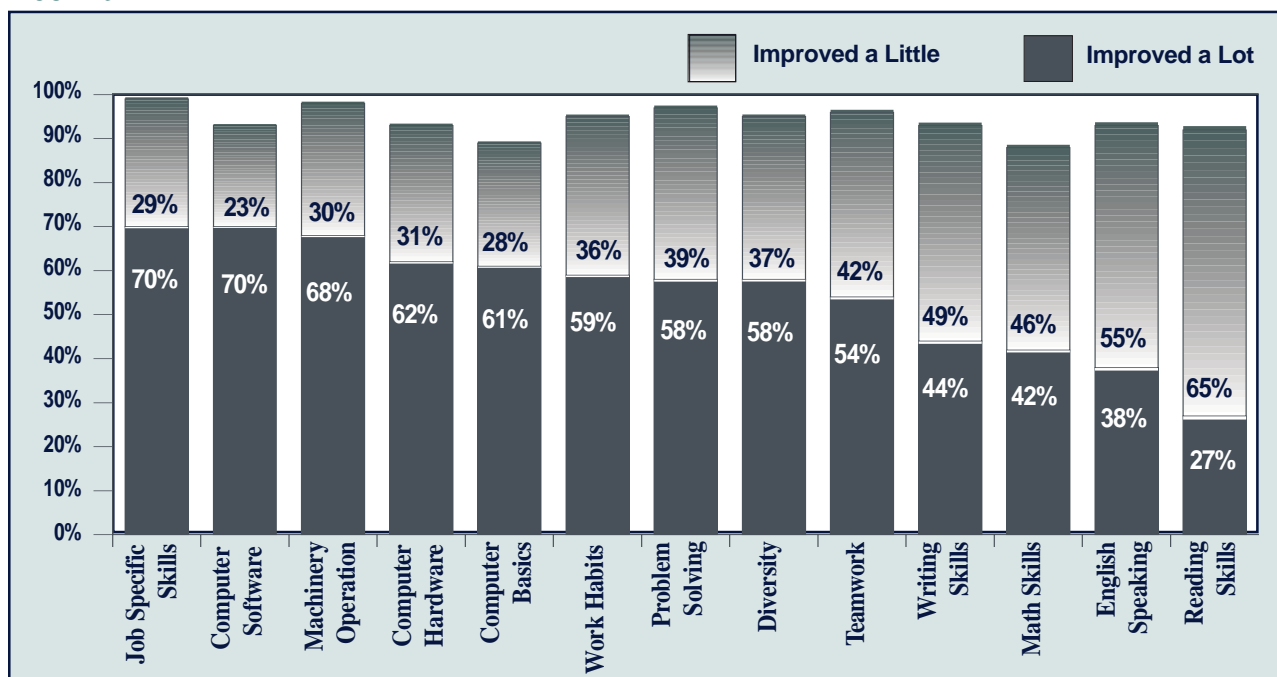
FIGURE 2

Percent of Students Reporting Specific Skills Training



## Percentage of Community and Technical College Students Receiving Specific Skills Training Who Reported Their Skills Improved a Little or a Lot

FIGURE 3



Among students employed 6 to 9 months after leaving the program, 72 percent said the education and job training they received were related to their job. Students who completed training were more likely to report that their training was very related to their job (75 percent of completers, as opposed to 51 percent of participants as a whole).

A higher proportion of women than men complete degrees or certificates by about 10 percentage points. Men were more likely than women to receive training in the operation of machinery (70 percent to 36 percent). Women, however, were more likely to receive training in computer basics (85 to 62 percent).

## Participant Satisfaction

Former students were generally satisfied with their college program, with 91 percent reporting they were very or somewhat satisfied with the program as a whole. Satisfaction with overall training quality, instruction, equipment, facilities, length of program, and usefulness for their careers were all close to or above 90 percent. Eighty-five percent of students surveyed reported being satisfied with the opportunities to interact with instructors. Survey results indicate students do not leave college training because of equipment, buildings, quality of teaching, or perceived usefulness to their careers. In each of these areas, noncompleters were either as satisfied or more satisfied than those who completed their program.

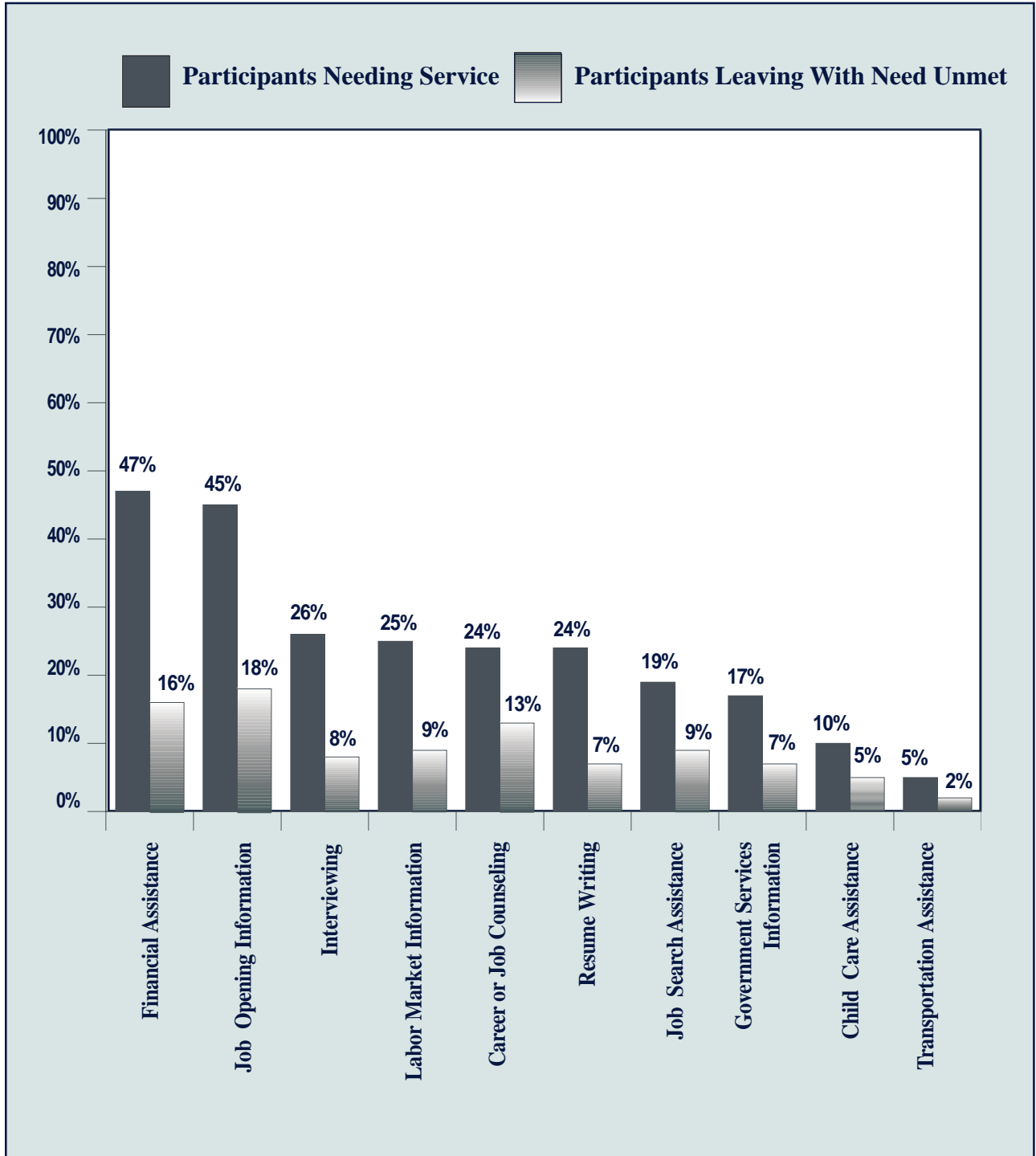
Overall, 91 percent reported they had met their educational objectives (of these, 51 percent reported they had definitely met their educational objectives). Only 9 percent of students said their educational objectives were not met at all.

Students were also asked about support services related to their college training. Services most frequently needed were financial assistance (47 percent) and information about job openings (45 percent). Less frequently needed, but still requested, was assistance in interviewing (26 percent), labor market information (25 percent), career or job counseling (24 percent), resume writing (24 percent), and information about other government programs (17 percent). (See Figure 4.) Female students were much more likely than male students to report needing child care assistance (15 to 4 percent).

Students offered mixed reviews about whether their support service needs were actually met. (See Figure 4.) For example, 16 percent of the participants left the program with their need for financial assistance unmet, and 18 percent left the program with their need for information about job openings unmet. While relatively few students left with unmet needs for other services, many who needed job search assistance (44 percent), career counseling (49 percent), and child care (55 percent) did not receive the service.

## *Support Service Needs of Community and Technical College Training Students*

FIGURE 4



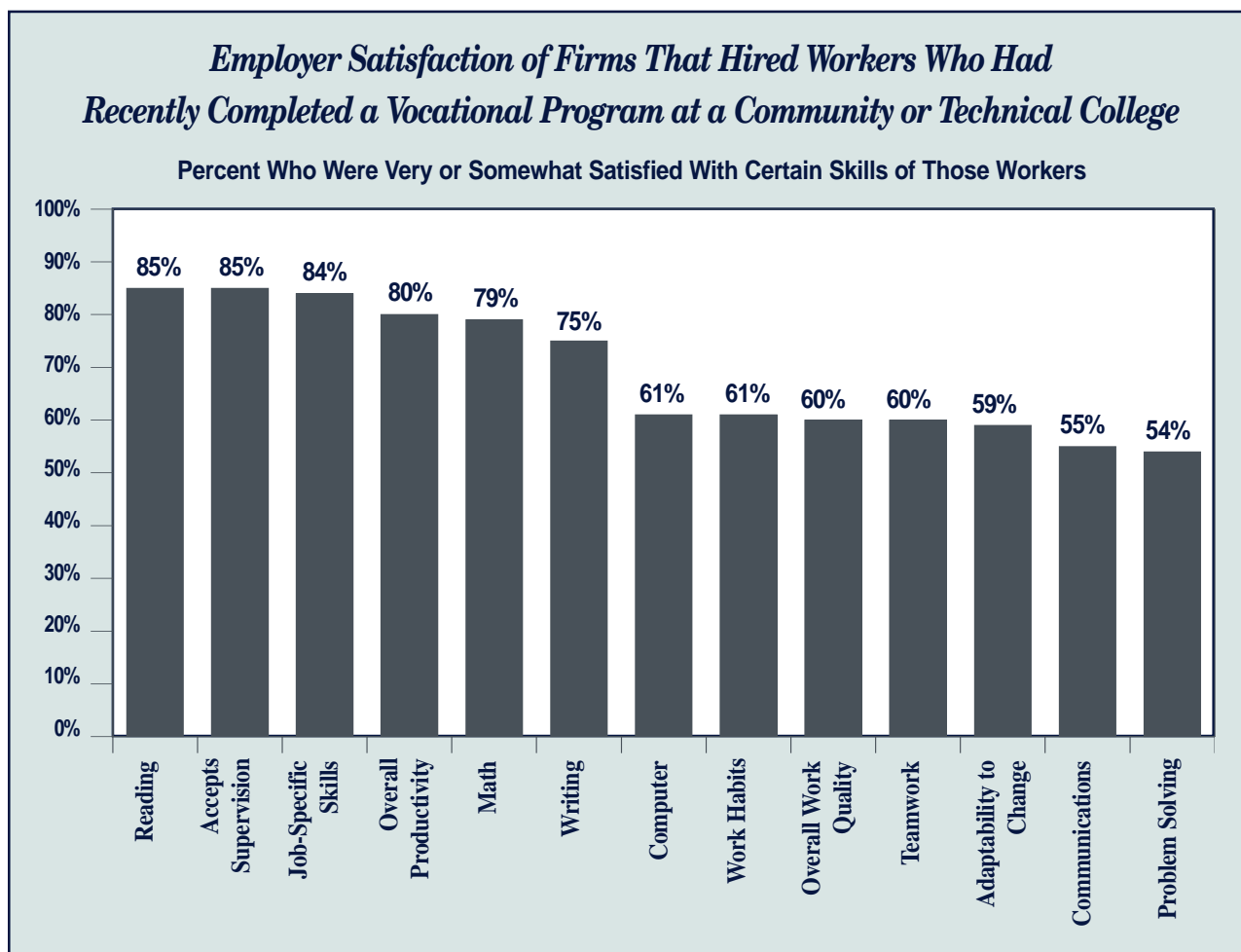
## Employer Satisfaction

The employer survey asked firms to evaluate new employees who recently completed a vocational program at a community or technical college. The results indicate that most employers were satisfied with the quality and productivity of these workers. Sixty percent said they were either somewhat or very satisfied with the overall quality of work of these new employees.<sup>9</sup> A full 80 percent were satisfied with the workers' overall productivity. (See Figure 5.)

Employers rated new workers' skills high in several areas. Skills that rated high most frequently were reading (85 percent satisfied), accepting supervision (85 percent),

<sup>9</sup> This response for employer satisfaction is a decline from the 1995 survey results. In 1995, 87 percent of employers said they were satisfied with the overall quality of work of such employees. The recent survey, however, used a different response scale (very satisfied, somewhat satisfied, somewhat dissatisfied, very dissatisfied; compared to very satisfied, somewhat satisfied, not very satisfied). This change may be the reason for the decline rather than any real difference in employer opinion.

FIGURE 5



job-specific skills (84 percent), math (79 percent), and writing (75 percent). Less satisfaction was reported with new workers' computer skills (61 percent satisfied), work habits (61 percent), teamwork (60 percent), adaptability to change (59 percent), communication skills (55 percent), and problem solving skills (54 percent).

These results roughly parallel the areas of employer satisfaction and dissatisfaction in the 1995 survey with some variation. In both years, a large majority of employers

were satisfied with job-specific skills, reading, and writing. In both years, relatively fewer were satisfied with former students' computer skills.

## Employment and Earnings

According to survey responses, 86 percent of all 1995–96 college vocational students were employed during the period 6 to 9 months after leaving their program. (See Figure 6.) For program completers, the

FIGURE 6

<i><b>Employment and Earnings<sup>10</sup> of Community and Technical College Job Preparatory Students in the Third Quarter After Leaving Program</b></i>			
<b>School Year</b>	<b>1993–94 COMPLETERS*</b>	<b>1995–96 ALL</b>	<b>1995–96 COMPLETERS*</b>
Percent Self-Reporting Employment When Surveyed	n/a	81%	84%
Percent Self-Reporting Employment During the Third Quarter After Leaving Program	n/a	86%	88%
Percent With Employment Reported by Employers to the Employment Security Department the Third Quarter after Leaving Program	71%	62%	67%
Median Quarterly Hours Worked, of Those Working	448	452	454
Mean Quarterly Hours Worked, of Those Working	403	405	412
Percent Employed Full-Time of Those Working (averaging 30 or more hours/week)	n/a	63%	64%
Median Quarterly Earnings of Those Working	\$4,396	\$4,197	\$4,476
Size of Household Which Median Earnings Would Support at Poverty Level <sup>11</sup>	n/a	4.3	4.5
Size of Household Which Median Earnings Would Support at Twice Poverty Level	n/a	2.1	2.2
Median Hourly Wage of Those Working	\$10.39	\$9.82	\$10.35

\*Completer as defined by receiving a certificate or degree.

<sup>10</sup> All wages and earnings are stated in first quarter 1997 dollars.

<sup>11</sup> The federal poverty guidelines as identified by the Department of Health and Human Services.

rate was 88 percent. To find out more about the former students' postprogram employment and earnings, we matched student records with the state's Employment Security Department wage files. These files contain information only on individuals with employment reported for unemployment insurance purposes (85 to 90 percent of the total employment in the state, with self-employment being the largest type of employment not covered).

Record matches found 62 percent of the 1995–96 vocational students had employment reported to the Employment Security Department during the third quarter after they left their program. Their median wage was \$9.82 per hour, and they worked a median 452 hours during the third quarter, resulting in median quarterly earnings of \$4,197. Eleven percent of the former students had reported employment in manufacturing industries, including aerospace, and 16 percent indicated they were employed in the health care industry.

Limiting our analysis to those students who completed their program by receiving a degree or certificate, the outcomes are higher. For example, 67 percent of the 1995–96 college vocational completers were found to have employment reported to the Employment Security Department during the third quarter after they left their program (almost exactly the same result as the earlier study of 1993–94 students), as opposed to 61 percent for noncompleters. The median wage of completers with reported employment

was \$10.35 per hour; their counterparts who left a vocational program before completing a certificate or degree had median wages of \$9.34 per hour.

In order to examine the wage distribution of former students, we divided Washington workers into quintiles based on their hourly wage. The percent of participants who had hourly wages in the third quarter postprogram in each quintile was:<sup>12</sup>

- The lowest 20% of Washington workers ..... 16%
- The second 20% of Washington workers ..... 30%
- The middle 20% of Washington workers ..... 28%
- The fourth 20% of Washington workers ..... 19%
- The highest 20% of Washington workers ..... 7%

<sup>12</sup> The lowest quintile ranges from \$4.90 to \$6.71, the second quintile is from \$6.72 to \$9.38, the third quintile is from \$9.39 to \$13.43, the fourth quintile is from \$13.44 to \$20.62, and the top quintile starts at \$20.63. These values are inflation adjusted from 1995 Unemployment Insurance wage records.

The third quarter after leaving their program, the typical (median) student with reported employment had sufficient earnings to support a household of 4.3 persons above the poverty level. Using a higher income standard, the typical employed student earned enough to support 2.1 persons at a “family wage” of twice the poverty level.

Earnings varied by gender and race-ethnicity. Among those with employment reported to the Employment Security Department during the third quarter after leaving the program, male students’ earnings were about 20 percent higher than female students’ earnings, due to working more hours (about 10 percent more) and earning hourly wages approximately 10 percent higher. Native American students had the lowest employment rates for any racial-ethnic group studied at over 5 percentage points below the overall employment rate for other students. This discrepancy held for both Native American completers and noncompleters. African-American noncompleters also had low employment rates at 9 percent below the overall program employment rate. However, it is important to note that similar gender and racial-ethnic differences existed in these students’ employment and earnings before they entered college.

According to the survey responses, 67 percent of those with a job at 9 months after leaving their program received medical benefits as part of their employment, with 44 percent reporting receipt of pension benefits. Sixteen percent of the students reported

receiving some form of public assistance during the past 12 months (either Aid to Families with Dependent Children or Food Stamps).

## Areas for Improvement

Overall, a large majority of students were satisfied with their college training program. After training, most students obtained jobs that paid a decent wage. Postprogram earnings and wages were somewhat higher than found in the previous evaluation. Both students and employers gave the colleges high marks in training individuals in job-specific skills. There are, however, other program areas that are relatively weaker.

The last outcome evaluation found that the colleges could improve programs by targeting computer training and support services in the areas of career counseling, advice on course selection, and assistance in finding a job. The current evaluation continues to find these as relatively weaker areas that could be improved.

Both the recent participant and employer survey results suggest the colleges might do more to train students in computer skills, work habits, problem solving, and teamwork. Seventy percent or fewer of the students reported receiving training in these areas, and no more than 70 percent of employers were satisfied with these skills among their new employees who had recently completed a vocational program at a community or technical

college. Employers also indicated relatively low satisfaction with these employees' communication skills.

Those who received a support service were generally satisfied, but access appears to be too limited. For example, almost half of those who reported needing career counseling or job search assistance, and more than half of those who needed child care assistance, indicated that they did not receive the service. The colleges might also do more to supply students with financial assistance and information about job openings.

Finally, the colleges might do more to eliminate differences in the labor market outcomes for women and for Native Americans.

# Private Career Schools

Private career schools are independent businesses that provide students with a variety of occupational training. There are nearly 300 private career schools in Washington State; together they provide between 150 and 175 different instructional programs to approximately 35,000 students each year. No public funds are appropriated for private schools, but eligible students may:

1. Obtain federal grants and loans to pay for educational expenses if the school they choose has been authorized to participate in federal student aid programs; or
2. Secure funding under ESHB 1988, the Worker Retraining Program, if their course of study is not available at a public institution within the student's congressional district. About 300 private career school students had received funding under ESHB 1988 by the end of the 1995–96 school year.

There are 230 private, certificate-granting vocational institutions licensed by the Workforce Training and Education Coordinating Board. Eight private schools grant associate and baccalaureate degrees and are regulated by the Higher Education Coordinating Board. The state's 57 cosmetology schools are regulated by the Department of Licensing and, therefore, are not included in this study.

There is no central data file on private career school students. Therefore, it was necessary to ask the schools to volunteer information on their students (the Federation of Private Career Schools and Colleges encouraged member schools to participate). Sixteen private career schools in twenty-two locations throughout the state, including some of the larger vocational schools, submitted information on their students.

In all, this sample represents a small fraction of the private career schools. The schools in the sample, however, include approximately 30 percent of private career school students in the state. Of the 16 schools that responded, 2 are among the 8 degree-granting schools. The sample differs significantly from WTECB's previous *Evaluation of Private Career Schools (1997)*.

Almost two-thirds of the sample for this study comes from computer and health-related schools. Such schools constitute only about one-sixth of all private career schools in the state. Except for employer satisfaction, the findings reported here represent results for only the 16 responding schools and cannot be generalized to all private career schools.

For the study, employment records from the Employment Security Department were analyzed for 4,404 individuals who were students at one of the 16 private career schools during 1995–96. (The Employment Security records contain wage and hours of work for approximately 85 to 90 percent of in-state employment.) Of the 4,404 students, 2,865 completed their program, and 1,539 did not. The median length of enrollment was seven months. In addition, 206 (of which 169 completed their program) of the students responded to a telephone survey conducted during the fall of 1997, providing additional data on employment and their satisfaction with training.

## Participant Characteristics

Participating private career school students were generally more diverse than the state population in terms of both race-ethnicity and gender.<sup>13</sup> (See Figure 7.) Twenty-six percent of the private career students were people of color, compared to 17 percent for the state population as a whole. All racial-ethnic groups (except Hispanics, who make up 3.8 percent of the population of private career schools) had higher representations in the private career schools surveyed than in the state population. The percent of African-Americans in private career schools is particularly noteworthy: the percentage of African-Americans enrolled in the private career schools studied was four times the percentage of African-Americans represented in the state

population. The percentage of women was about as high as any other program studied. Women were 67 percent of the students. Three quarters of the students were in the 18–44 age bracket, with almost half between 25–34 years of age.

Based on survey responses, all but 1 percent of enrollees at the private career schools studied had a high school diploma or GED. Two out of three had some postsecondary enrollment. Less than one-third (29 percent) had a postsecondary certificate or degree.

Prior to enrollment, private career school students earned more than JTPA Title II-A and Adult Basic Education participants but less than Apprenticeship participants, community college job preparatory students, and JTPA Title III participants. In the third quarter before enrolling in their program, 46 percent of future private career students were employed and worked a median of 392 hours per quarter. Their median wage at this time was \$7.65 per hour, resulting in median quarterly earnings of \$2,863.

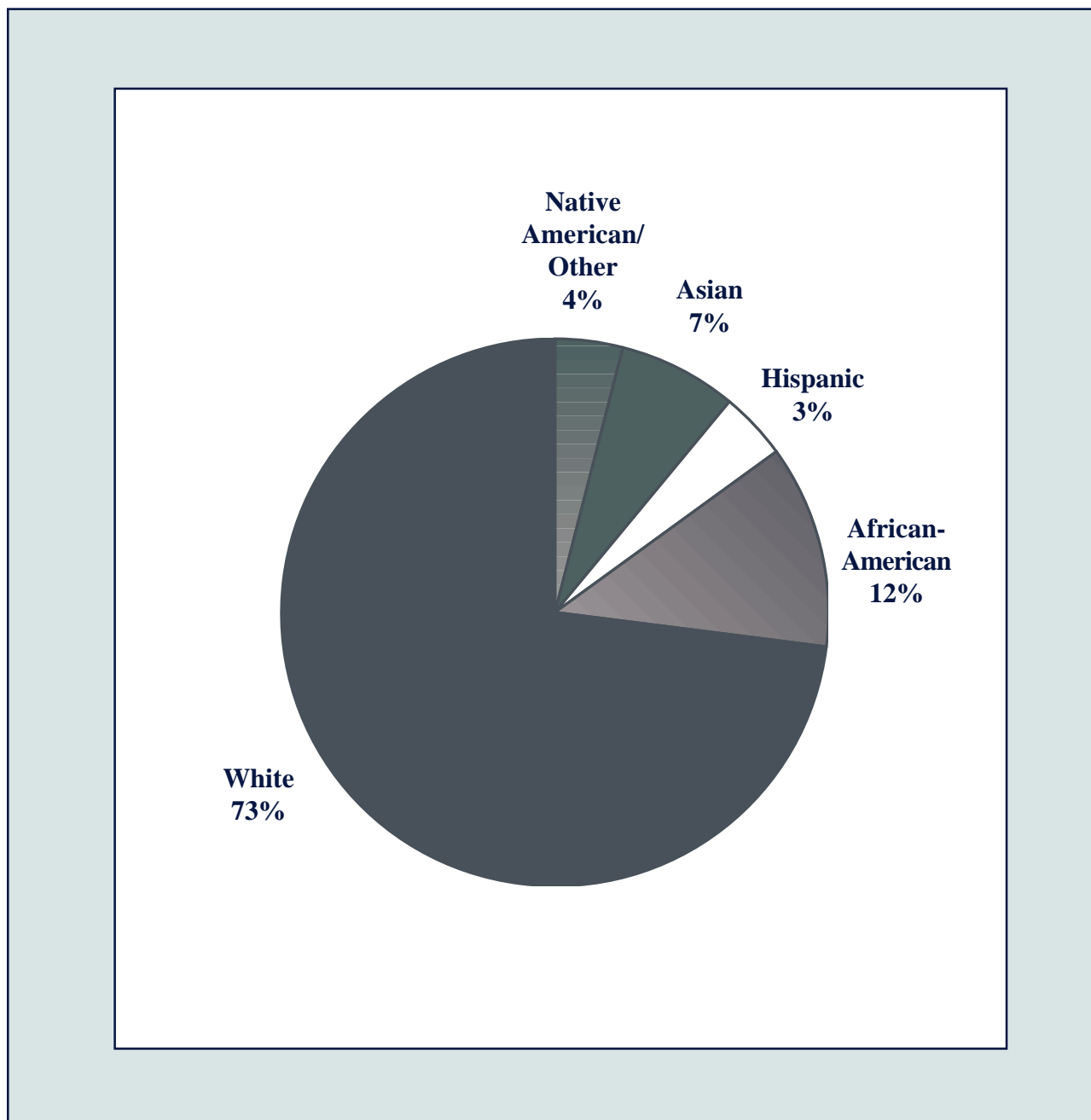
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<sup>13</sup> Several participating schools did not supply race-ethnicity information on their students. These statistics are based on 55 percent of the participants for whom WTECB obtained data.

## *Characteristics of Private Career School Students*

### **Race and Ethnicity**

FIGURE 7



## Competency Gains

According to the survey results, almost all students indicated that they entered a private career school to acquire skills for a new job (91 percent). Students also said they enrolled for personal enjoyment (85 percent), or to finish a degree (54 percent.) While enrolled, most students received training in specific job skills (89 percent of the students), computers (77 percent), operation of machinery (62 percent), teamwork (56 percent), work habits (54 percent), and problem solving (52 percent). (See Figure 8.)

Students who reported receiving training in a specific skill often said their skill improved a lot. (See Figure 9.) Students reported that their skills had improved a lot in operation of machinery (76 percent of the students), specific job skills (71 percent), computer basics (65 percent), problem solving (54 percent), math skills (49 percent), teamwork (41 percent), and work habits (38 percent).

In general, women were more likely than men to receive computer training (88 percent of women reported receiving training in this area, compared to only 52 percent of men). Men, on the other hand, received training in the operation of machinery more often than women (76 to 58 percent, respectively).

Among those employed after training, 71 percent stated that their job was related to the training they received at a private career school. Of those who completed their vocational program, 53 percent said their job at 9 months following their program was very related to the vocational training they received; only 30 percent of noncompleters responded similarly.

## Participant Satisfaction

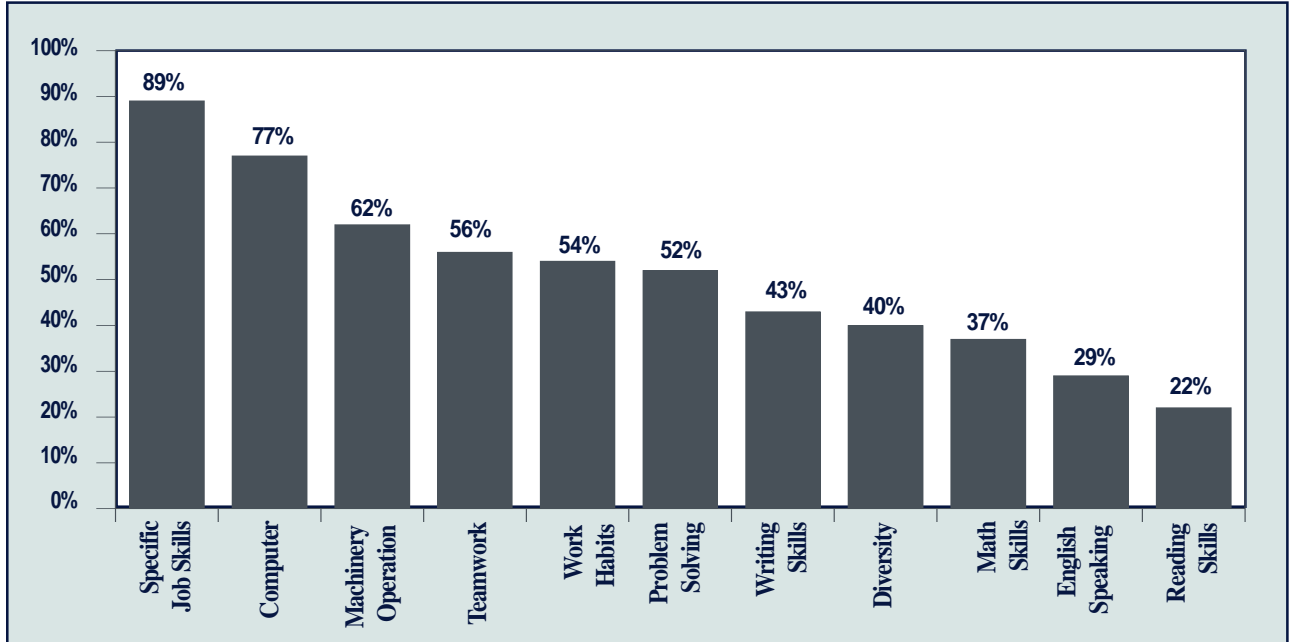
On the whole, former students were satisfied with their private career school. Eighty-four percent reported that their educational objectives were met by the training they received (51 percent said their objectives were definitely met). Sixteen percent said their objectives were not met at all. Students reported being somewhat or very satisfied with the length of the program (84 percent), the quality of teaching (82 percent), the usefulness of the program to their career (77 percent), and the amount of student-teacher interaction (75 percent). Overall, 77 percent said they were satisfied with their program.

Students reported needing some key support services as part of their private career school education. For example, 61 percent of the students said they needed information about job openings and 60 percent said they needed financial

### *Training of Private Career School Students*

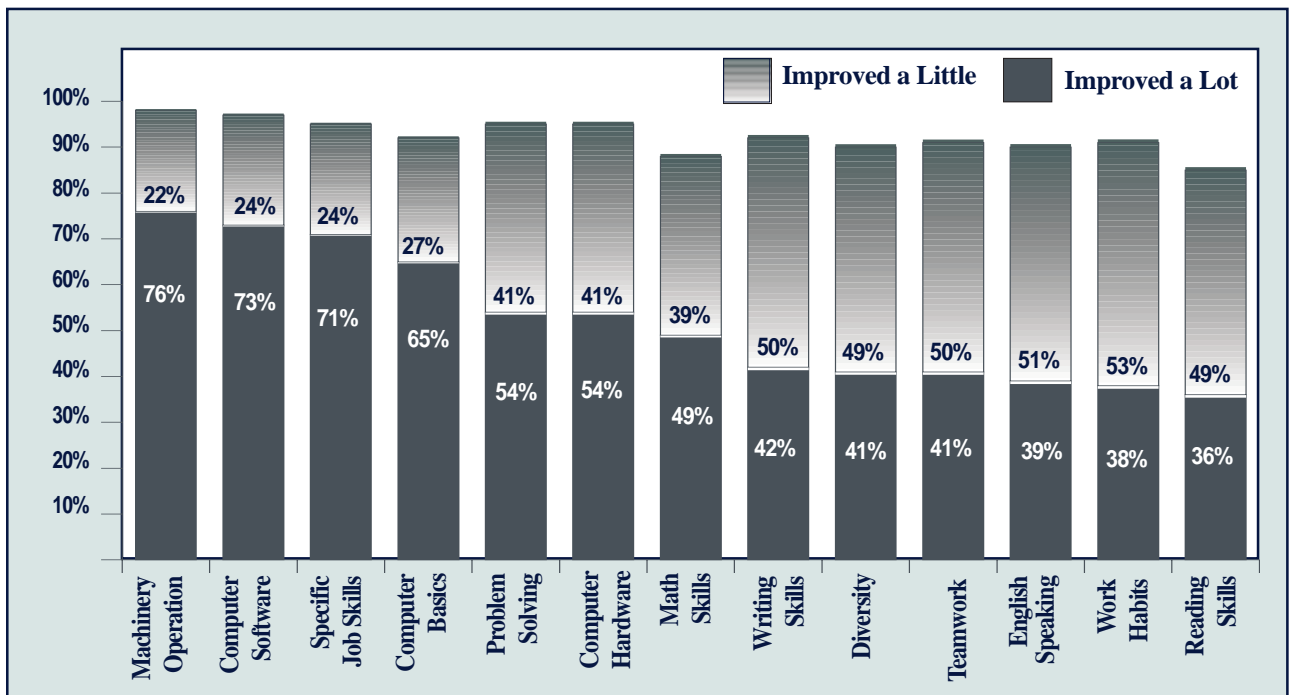
FIGURE 8

Percent of Students Reporting Specific Skills Training



### *Percentage of Private Career School Students Receiving Specific Skills Training Who Reported Their Skills Improved a Little or a Lot*

FIGURE 9



assistance. In addition, 44 percent of the students reported needing help with resume writing (of these, 54 percent of women reported needing help with resume writing, while only 18 percent of men said they needed help in this area). Thirty-eight percent of students said they needed help with interviewing skills, 35 percent with labor market information, and 31 percent with career or job counseling. (See Figure 10.)

In most cases where students needed services, they were provided. Financial assistance, in particular, was provided to 89 percent of those who say they needed it. However, job search assistance and information about job openings were not provided to nearly one-third (32 percent) of those expressing a need. Services were provided to slightly more than half of those expressing a need for labor market information or for information about government services. Although few expressed a need for child care assistance, only half of those who did received it.

When assistance was provided, it usually met the students' needs. However, 30 percent of students left with their need for information about job openings unmet, 16 percent left with their need for career or job counseling unmet, and 16 percent left with their need for information about the labor market unmet. (See Figure 10.)

## Employer Satisfaction

The employer survey asked firms to evaluate new employees who had recently completed a program at a private career school. Fifty-two percent of employers said they were either somewhat or very satisfied with the overall quality of work of these new employees.<sup>14</sup> A full 95 percent were satisfied with the workers' overall productivity. (See Figure 11.)

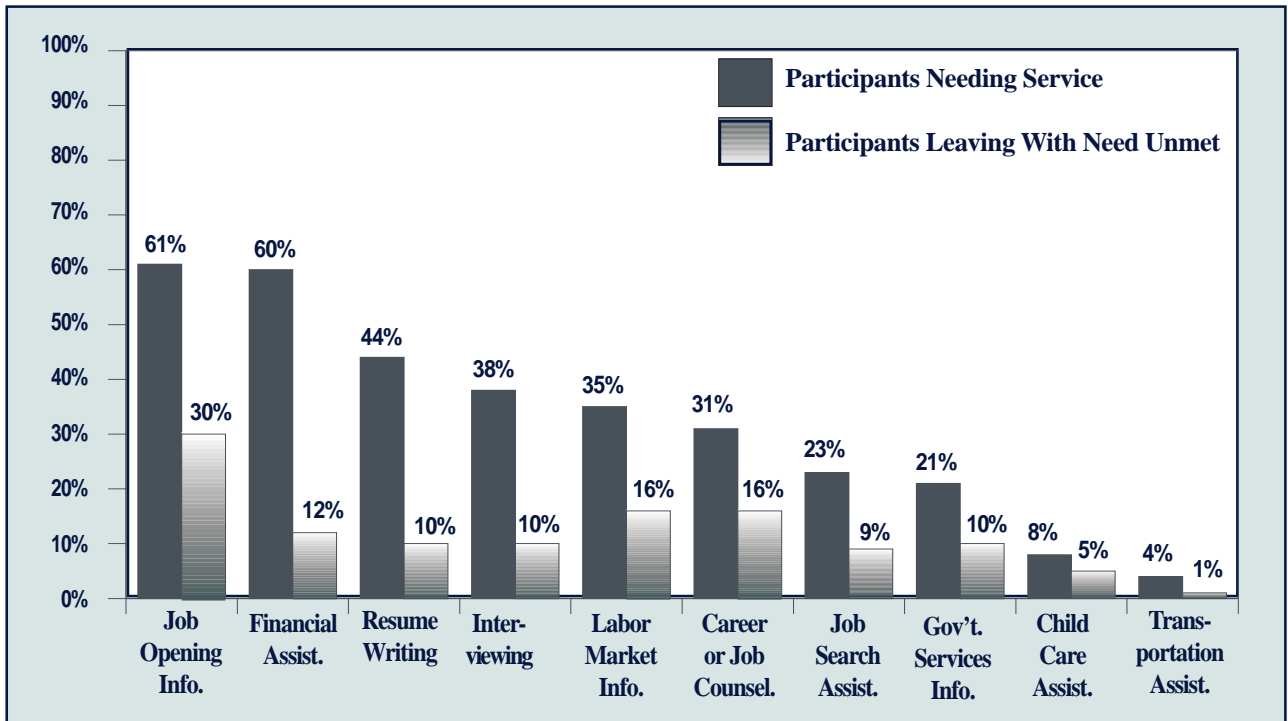
Employers rated new workers' skills high in several areas. Most often rated high were new workers' computer skills (95 percent satisfied), reading skills (94 percent), writing skills (92 percent), and math skills (91 percent). Employers reported less satisfaction with new workers' job-specific skills (only 56 percent satisfied) and with general workplace skills (70 to 75 percent).

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<sup>14</sup> This response for employer satisfaction is a decline from the 1995 survey results. In 1995, 87 percent of employers said they were satisfied with the overall quality of work of such employees. The recent survey, however, used a different response scale (very satisfied, somewhat satisfied, somewhat dissatisfied, very dissatisfied; compared to very satisfied, somewhat satisfied, not very satisfied). This change may be the reason for the decline rather than any real difference in employer opinion.

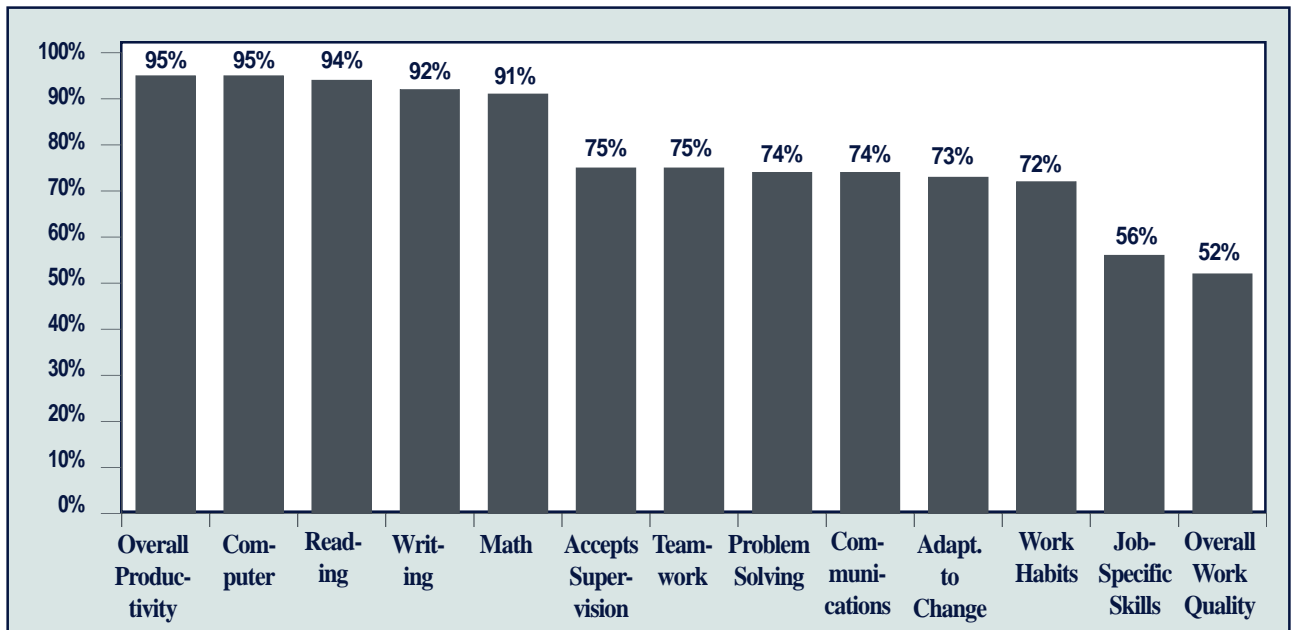
FIGURE 10

*Support Service Needs of Private Career School Students*



*Employer Satisfaction With New Employees Who Had Recently Completed a Private Career School Program*

FIGURE 11 Percent Who Were Very or Somewhat Satisfied With Certain Skills of Those Workers



## Employment and Earnings

According to survey responses, 82 percent of the 1995–96 private career school students were employed during the period 6 to 9 months after leaving their program. (See Figure 12.)

To find out more about former students' postprogram employment and earnings, we matched student records with the

Employment Security Department's wage files. These files contain information only on individuals with employment reported for unemployment insurance purposes (85 to 90 percent of in-state employment).

Based on these matches, 55 percent of the 1995–96 private career school students were found to have employment reported to Employment Security during

FIGURE 12

<i>Employment and Earnings<sup>15</sup> of Private Career School Students in the Third Quarter After Leaving Program</i>		
	ALL	COMPLETERS
Percent Self-Reporting Employment When Surveyed	78%	80%
Percent Self-Reporting Employment During the Third Quarter After Leaving Program	82%	84%
Percent With Employment Reported by Employers to the Employment Security Department the Third Quarter after Leaving Program	55%	58%
Median Quarterly Hours Worked, of Those Working	437	448
Mean Quarterly Hours Worked, of Those Working	383	396
Percent Employed Full-Time of Those Working (averaging 30 or more hours/week)	58%	62%
Median Quarterly Earnings of Those Working	\$3,683	\$3,835
Size of Household Which Median Earnings Would Support at Poverty Level <sup>16</sup>	3.5	3.7
Size of Household Which Median Earnings Would Support at Twice Poverty Level	1.8	1.9
Median Hourly Wage of Those Working	\$8.46	\$8.47

<sup>15</sup> All wages and earnings are stated in first quarter 1997 dollars.

<sup>16</sup> The federal poverty guidelines identified by the Department of Health and Human Services.

the third quarter after they left their program. The median wage for this group was \$8.46 per hour. Sixteen percent had reported employment in business services, 11 percent in the health care industry, and 8 percent in manufacturing and aerospace industries.

Limiting our analysis to only those students who had completed their private career school program by receiving a degree or certificate, 58 percent of the 1995–96 private career school completers were found to have employment reported to the Employment Security Department during the third quarter after leaving their program. The median wage of completers with reported employment was \$8.47 per hour.

In order to examine the wage distribution of former students, we divided Washington workers into quintiles based on their hourly wage. The percent of participants who had hourly wages in the third quarter postprogram in each quintile is shown below.<sup>17</sup>

- The lowest 20% of Washington workers ..... 22%
- The second 20% of Washington workers ..... 42%
- The middle 20% of Washington workers ..... 25%
- The fourth 20% of Washington workers ..... 9%
- The highest 20% of Washington workers ..... 2%

The third quarter after they left their private career school training, the typical (median) employed student had sufficient earnings to support a household of 3.5 persons above the poverty level. The typical student earned enough to support 1.8 persons at a “family wage” of twice the poverty level.

According to the survey responses, 61 percent of those employed had health benefits provided by their employer, and 33 percent received pension benefits. Seven percent reported they belonged to a union. Fifteen percent reported they received some form of public assistance during the previous twelve months (Aid to Families with Dependent Children and/or Food Stamps). Earnings varied by both gender and race-ethnicity. In general, men earned more than women by working more hours at higher hourly rates, though the “gender gap” in hourly wages was significantly narrower among those who graduated from their vocational training. Hispanics had the highest wage rates, hours, and earnings studied: their median wage was \$8.77 per hour and \$8.93 per hour among those who completed their vocational training. Native Americans, on the other hand, tended to have the lowest hourly rates, hours, and earnings: their median wage was \$8.19 per hour.

<sup>17</sup> The lowest quintile ranges from \$4.90 to \$6.71, the second quintile is from \$6.72 to \$9.38, the third quintile is from \$9.39 to \$13.43, the fourth quintile is from \$13.44 to \$20.62, and the top quintile starts at \$20.63. These values are inflation adjusted from 1995 Unemployment Insurance wage records.

## Areas for Improvement

In considering the evaluation of private career schools, the reader must keep in mind that most of the results are based on a small nonrandom sample of schools that volunteered to take part in the study. One must not assume that results are typical of private career schools in general. (Since the schools participating in the study were different than in the previous WTECB *Evaluation of Private Career Schools*, no comparison is made with the earlier evaluation.)

Most of the students from the schools in the study reported they were very satisfied with their training, they were employed, their training was related to their employment, and their training increased their job-specific skills a lot.

Based on the student and employer survey responses, the schools could do more to improve general workplace skills. Only a little more than half of the students reported receiving training in problem solving, work habits, or teamwork. Among employers who had recently hired a graduate of any private career school, between 70 and 75 percent were satisfied with each general workplace skill.

Access to support services could also be improved. The two support services that the most students needed were information about job openings and financial assistance. While most students needing financial assistance said their needs were met, only about half of those needing information about job openings said their needs were met. While fewer students needed other types of support services, among those who did need career and job counseling, labor market information, and job search assistance, between 32 and 42 percent said they did not receive the service, and more than half who needed child care assistance did not receive it. Finally, the plurality of students were only somewhat satisfied with advice on program selection.

# Apprenticeship

This is the first analysis of apprenticeship performed by the Workforce Training and Education Coordinating Board. Apprenticeship in Washington State is governed by the Washington State Apprenticeship and Training Council and administered by the Department of Labor and Industries. Apprenticeship combines classroom studies with extensive on-the-job training under the supervision of a journey-level craft person or trade professional. Apprentices receive wages, health, pension, and other benefits while learning trade skills. Apprenticeships require that applicants be at least 16 years old (18 for construction trades), and most require at least a high school diploma or GED for entrance.

For this study, administrative records were obtained for 3,128 participants who left an apprenticeship program during the 1995–96 year. Of the 3,128 participants, 1,326 graduated from their apprentice program. Eighty-eight former apprenticeship trainees completed the telephone survey during the summer of 1997.

Both completers and noncompleters spend a significant amount of time in their apprenticeship program. Overall, apprentices spent a median of 25 months in their program. Completers put in even

more time at a median of 40 months, and even those who dropped out of an apprentice program still spent a median of 11 months in the program.

## Participant Characteristics

Prior to beginning their program, half of the future apprentices we studied were employed in relatively good-paying jobs. Among those employed in the third quarter before their program, the median wage, \$10.46 per hour, was second only to participants of the JTPA Dislocated Worker program among the 9 programs we studied. In addition to their high hourly rate, future apprentices also worked a median of 413 hours for the quarter, resulting in median quarterly earnings of \$3,907. Of those apprentices who had employment records nine months before and nine months after training, many were working in the same industry<sup>18</sup> before and after training (40 percent overall and 53 percent for completers). These figures suggest the possibility that many apprentices were working in a related, skilled occupation before seeking training to achieve a journey-level credential.

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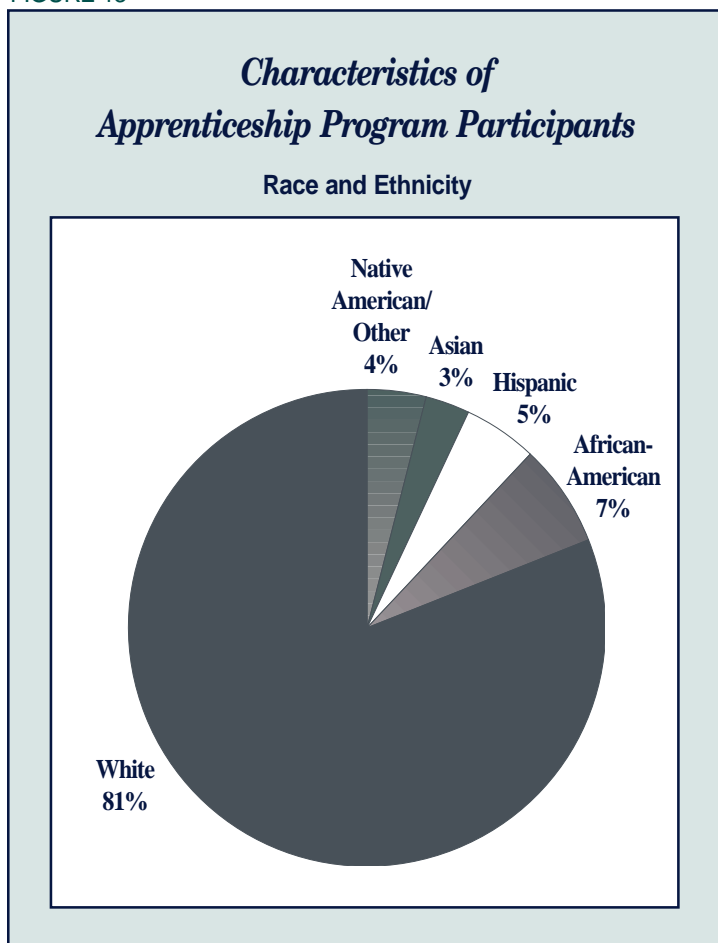
<sup>18</sup> Using a four-digit SIC code that separately identifies hundreds of types of industries.

The apprenticeship participants were more diverse than the state population in terms of race-ethnicity, except for Asian/Pacific Islanders who were underrepresented (60 percent of their portion of the state population). (See Figure 13.) Both African-Americans and Native Americans were represented at twice their proportion of the state population. Apprenticeship programs disproportionately register more men than women, with men making up 86 percent and women 14 percent of the participants ending an apprenticeship in 1995–96.

Apprenticeship programs tend to enroll a large percentage of young adults, with over 70 percent of participants in the 20–34 age bracket.

When we limit our analysis to only those students who graduated from their program, we see further differences by race-ethnicity and gender. The vast majority of apprenticeship graduates, as might be expected from enrollment patterns, are white. As a group, Asian/Pacific Islander apprentices have the highest apprenticeship completion rates, followed by whites. All other racial-ethnic groups have noncompletion rates that are almost 40 percent higher than the white noncompletion rate. As a result, among graduates, all racial-ethnic groups move closer to their state population proportions, except Hispanic apprentices, who fall to nearly half their state population rates. Whites shift to slightly above their state population rate among the graduate populations, and both African-American and Native American apprentice graduates remain above their respective state population rates, though less so than in the program as a whole. Still under represented, women make up a small percentage of apprenticeship completers at 13 percent.

FIGURE 13



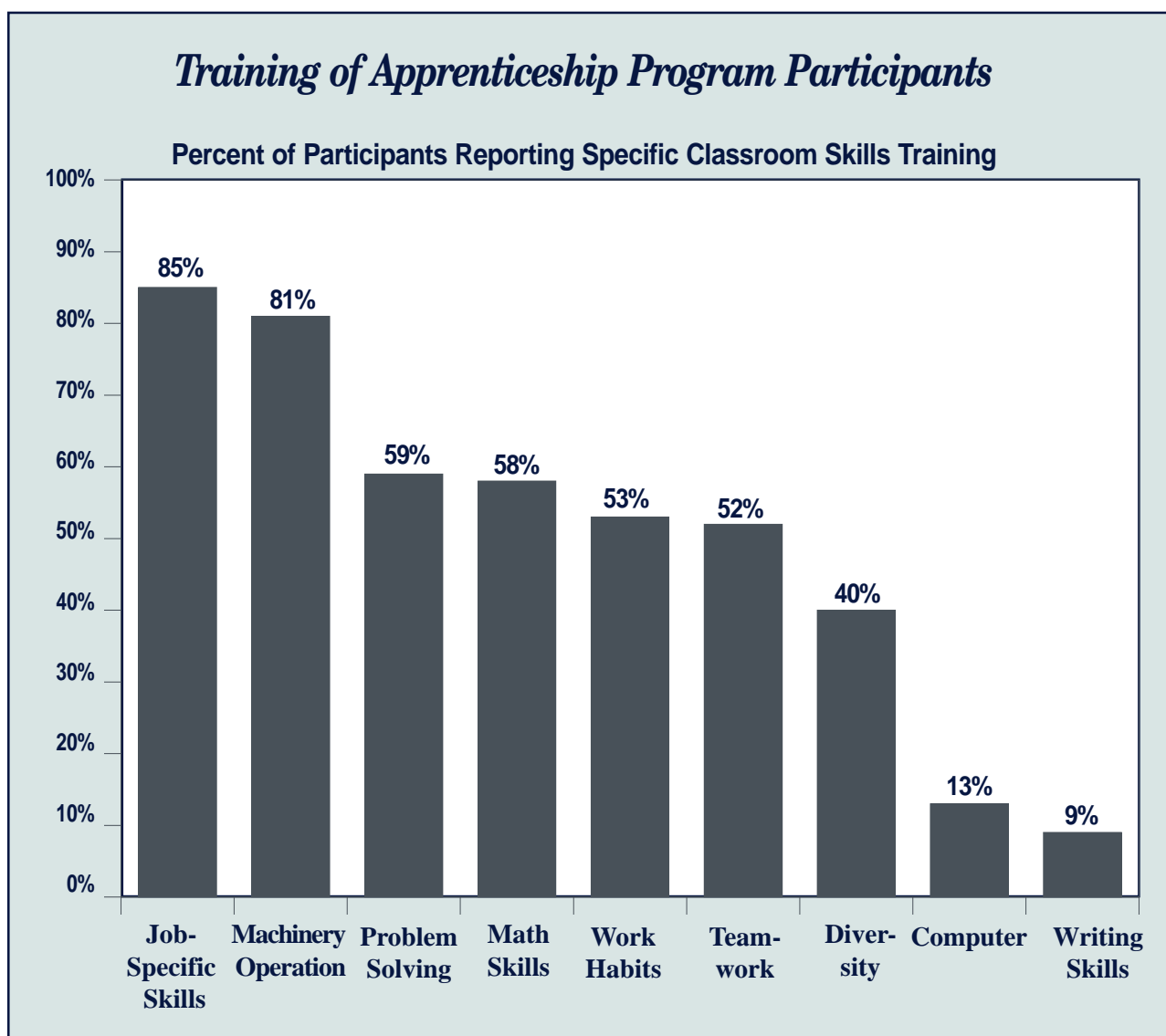
## Competency Gains

By definition, people enter an apprenticeship program to acquire occupation- or industry-specific training. Apprentices receive classroom and on-the-job training, so our survey asked apprentices about their experience with both. Former

apprentices reported receiving training in specific job skills (85 percent in classroom training, 86 percent on the job), operation of machinery (81 percent classroom, 82 percent on the job), problem solving (59 percent classroom, 61 percent on the job), math skills (58 percent classroom, 36 percent on the job), work habits (53 percent classroom, 56 percent

on the job), and teamwork (52 percent classroom, 58 percent on the job). Less than 9 percent of former apprentices said they received training in reading, writing, and speaking English, either in the classroom or on the job. Only 13 percent said they received any computer training. (See Figure 14.)

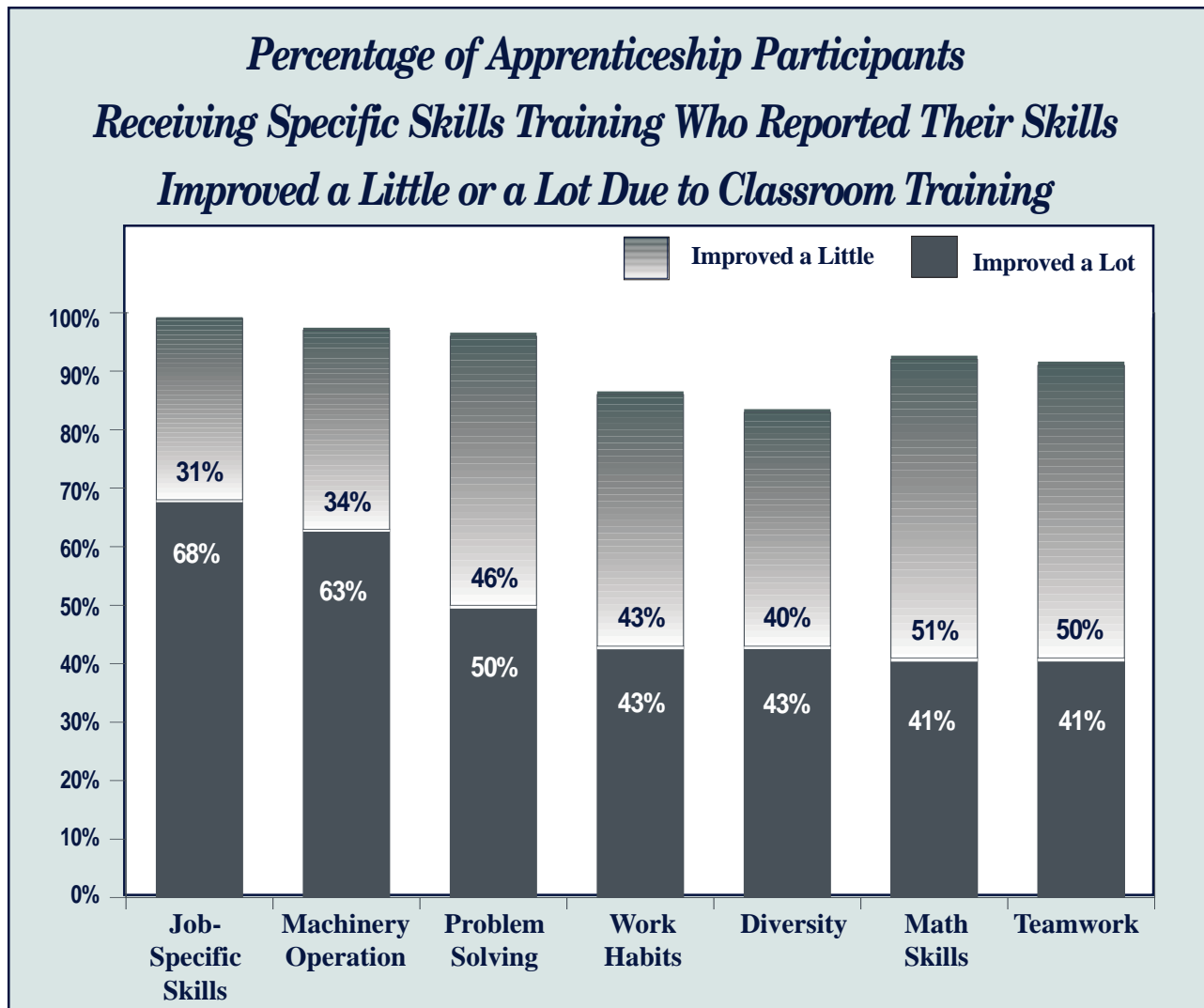
FIGURE 14



When they received training, former apprentices reported that their skills improved a lot in specific job skills (68 percent reported their skills improved a lot from classroom training, 77 percent reported their skills improved a lot from on-the-job training), operation of machinery (63 percent classroom, 67 percent on the job), and problem solving (50 percent classroom, 61 percent on the job). (See Figure 15.)

Significant numbers of former apprentices receiving general workplace and math training reported little or no increase in these skills. Sixty-three percent of those receiving work-habits training on the job, for example, reported that their skills improved a little or not at all (52 percent classroom). Sixty-eight percent of former apprentices said their math skills had undergone little or no improvement from on-the-job training (59 percent

FIGURE 15



classroom). Lack of major improvement in teamwork was also relatively high (59 percent classroom, 57 percent on the job) .

Among former apprentices who were employed when surveyed, 85 percent reported that their apprenticeship training was related to their job. The figure jumps to 93 percent when surveying only those who completed their apprenticeship program, and even for those who did not complete the program, 52 reported that their job at 9 months was related to the job training they received (possibly because even noncompleters spent a substantial amount of time in their program).

People of color who did not complete their apprenticeship were less likely to say that their job at nine months after leaving the apprenticeship was related to the training they received. This is perhaps explained by the fact that, on average, they spent less time in the program before leaving than whites who did not complete (the median white noncompleter dropped out after about 11 months; the median noncompleter of color dropped out at just over 9 months). Lastly, women noncompleters invested over 15 months in their apprenticeship program before dropping out, compared to the overall median of 11 months for noncompleters.

According to administrative records, the average apprenticeship noncompleter appears to receive more training than people who *completed* most other programs studied.

## Participant Satisfaction

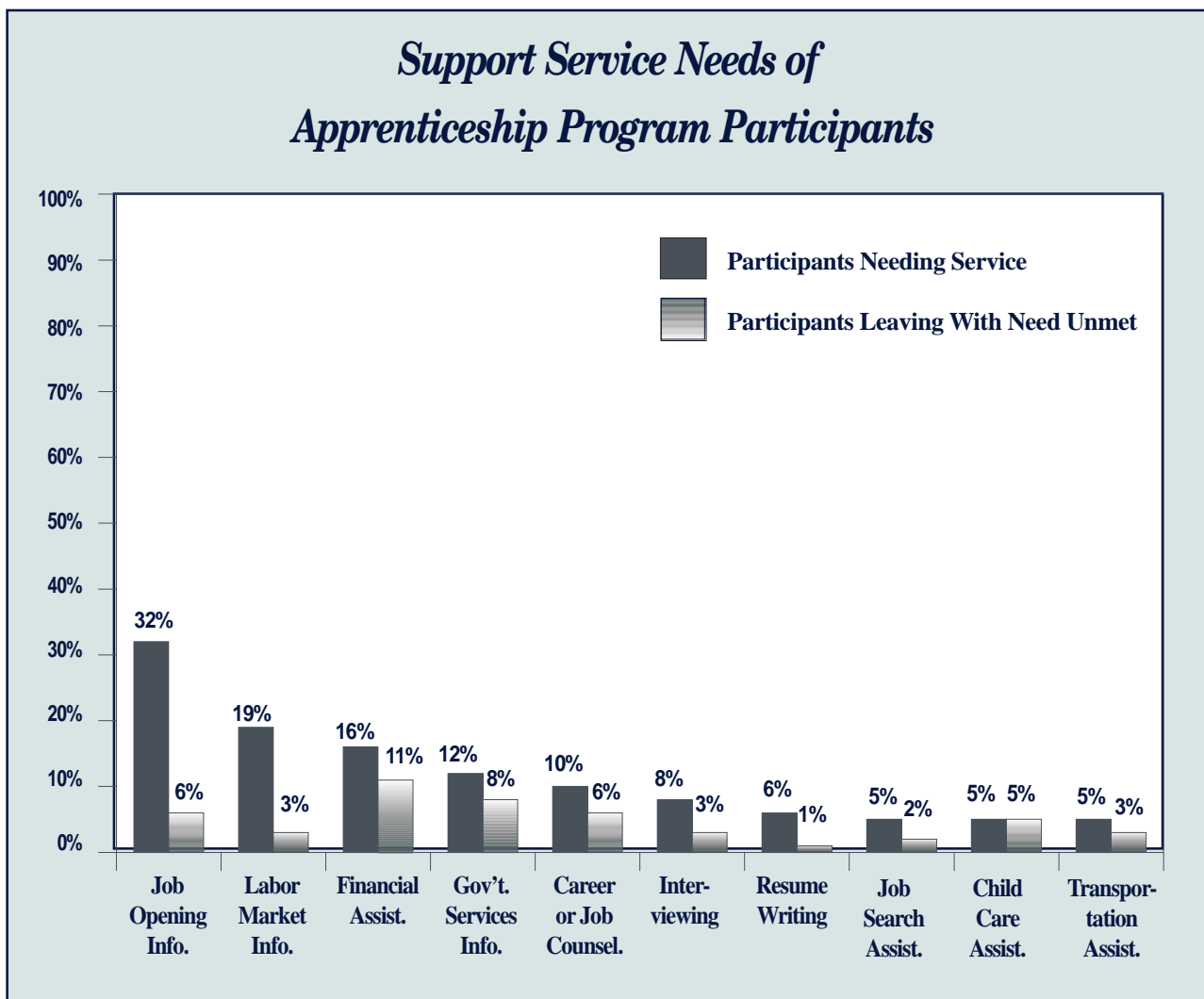
Survey results indicate that participants were, on the whole, satisfied with their apprenticeship program. Eighty-six percent stated that they met their educational objectives by participating in the training (of these, 51 percent stated that their educational objectives were definitely met), and only 14 percent said their educational objectives were not met at all. Eighty-five percent of participants reported they were satisfied with the overall quality of the program. Ninety-five percent of former apprentices were satisfied with the facilities, 93 percent with their opportunities to interact with teachers, 91 percent with the usefulness of the training to their career, and 91 percent were satisfied with the equipment used in training. Eighty-four percent of former apprentices were satisfied by the quality of the teaching in their program. Only eight percent reported being very dissatisfied with their program.

Apprentices reported a much lower need for support services than the other groups we studied. Their greatest needs were for information on job openings (32 percent), labor market information (19 percent), and financial assistance

(16 percent). (See Figure 16.) More than 80 percent of those needing labor market information, including job openings, said they had received it, and more than 90 percent said their needs were met by this service. Sixteen percent of the former apprentices reported

needing financial assistance. Of those, 36 percent said they received assistance, and 80 percent of financial aid recipients said it met their needs. In no area, however, did more than 11 percent of participants leave the program with their need for a support service unmet.

FIGURE 16



## Employment and Earnings

Economic outcomes for apprenticeships are higher than any other program we studied. In addition to the quality of apprenticeship training and the wage levels in these occupations, this result may be partly due to the relatively high earnings of apprentices before they entered the program and the relatively long length of the program. Even apprenticeship noncompleters have higher earnings and rates of employment than completers of other programs.<sup>19</sup>

Ninety-three percent of apprentices reported being employed nine months after leaving training. (See Figure 17.) According to Employment Security Department records, 68 percent of former apprentices had employment reported to the Employment Security

<sup>19</sup> The high proportion of noncompleters working in related fields suggests that positive outcomes for this group may be due to the training received in their apprenticeship program.

FIGURE 17

### *Employment and Earnings<sup>20</sup> of Apprenticeship Program Participants in the Third Quarter After Leaving Program*

	ALL	COMPLETERS
Percent Self-Reporting Employment When Surveyed	88%	94%
Percent Self-Reporting Employment During the Third Quarter After Leaving Program	93%	n/a
Percent With Employment Reported by Employers to the Employment Security Department the Third Quarter After Leaving Program	68%	84%
Median Quarterly Hours Worked, of Those Working	455	477
Mean Quarterly Hours Worked of Those Working	405	444
Percent Employed Full-Time of Those Working ( <i>averaging 30 or more hours/week</i> )	63%	74%
Median Quarterly Earnings of Those Working	\$6,934	\$10,207
Size of Household That Median Earnings Would Support at Poverty Level <sup>21</sup>	8.3	13.1
Size of Household That Median Earnings Would Support at Twice Poverty Level	4.2	6.6
Median Hourly Wage of Those Working	\$17.68	\$23.09

<sup>20</sup> All wages and earnings are stated in first quarter 1997 dollars.

<sup>21</sup> The federal poverty guidelines as identified by the Department of Health and Human Services.

Department during the third quarter after leaving the program. (Employment Security Department wage files include between 85 to 90 percent of the employment in Washington and do not include out-of-state employment). Based on record matches, the median wage of former apprentices the third quarter after leaving their program was \$17.68 per hour. Limiting our analysis to just those apprentices who completed their program, 94 percent said they were employed, and 84 percent had employment reported to the Employment Security Department; the median wage was \$23.09 per hour.

The third quarter after they left their apprenticeship program, the typical (median) participant had sufficient earnings to support a household of 8.3 persons above the poverty level. Using a higher income standard, the typical participant earned enough to support 4.2 persons at a “family wage” of twice the poverty level. Among completers, the numbers are even higher. The typical participant could support 13.1 persons above the poverty level and 6.6 persons at twice the poverty level.

In order to examine the wage distribution of former students, we divided Washington workers into quintiles based on their hourly wage. The following shows the percent of participants who had hourly wages in the third quarter postprogram in each quintile.<sup>22</sup>

The lowest 20% of  
Washington workers ..... 5%

The second 20% of  
Washington workers ..... 12%

The middle 20% of  
Washington workers ..... 18%

The fourth 20% of  
Washington workers ..... 26%

The highest 20% of  
Washington workers ..... 39%

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<sup>22</sup> The lowest quintile ranges from \$4.90 to \$6.71, the second quintile is from \$6.72 to \$9.38, the third quintile is from \$9.39 to \$13.43, the fourth quintile is from \$13.44 to \$20.62, and the top quintile starts at \$20.63. These values are inflation adjusted from 1995 Unemployment Insurance wage records.

According to the survey responses, 81 percent of those employed had health benefits provided by their employer, and 72 percent received pension benefits. Sixty percent of former apprentices said their job at nine months following their training was a union job; the highest union participation of any of the programs studied.

Earnings varied by race-ethnicity and gender. Women were found to have less than half the quarterly earnings of their male counterparts, due to fewer hours worked and lower hourly wages. This distinction held for both completers and the group as a whole.<sup>23</sup> African-American and Hispanic apprentices were also found to have lower earnings than other racial-ethnic groups by a margin of 5 to 20 percent. Again, this remained true for both completers and the entire group. We found no significant differences in rates of employment by gender or race-ethnicity.

Prior to entering apprenticeship training, there were similar differences in wages and earnings by gender and minority status. Comparing differences before and after training, it appears that most minorities narrowed their gap in overall earnings. While the gender gap in employment and earnings narrows for those who completed an apprenticeship, it widened among noncompleters.

## Areas for Improvement

The results for apprenticeship training are quite positive. Median earnings and wages were high, most participants were very satisfied with their overall training, almost all were employed, and almost all believed their training was related to their employment. (This was the first WTECB evaluation of apprenticeship, so no comparison is possible with earlier results.)

Apprenticeship training is training for specific occupations and industries. Most former participants said that their job-specific skills improved a lot, though perhaps more could be done to improve general workplace skills and math. A little more than half reported receiving training in teamwork, work habits, problem solving, or math. In each of these areas, the participants were about evenly split between those who said their skills improved a lot and those who said their skills improved a little. Few reported receiving instruction in computer skills. But it is unclear whether or not this is a problem in these fields.

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<sup>23</sup> The wage and earnings differences may reflect different trades studied by women and men.

The plurality of participants were very satisfied with most aspects of their training. Participants were relatively less satisfied with the long length of the program. Support services do not appear to be an issue for apprenticeship participants. Very few reported needing support services other than information about job openings, and almost all of this need was met.

The eradication of gender differences is clearly the area that is in most need of improvement. Relatively few women participated in the program. Only 14 percent of the participants and 13 percent of the completers were women. Moreover, after completing an apprenticeship, women had only half the earnings of men.

Apprenticeship programs should also address the relatively high dropout rate among minority participants, especially among Hispanics, and the somewhat lower earnings of African-Americans and Hispanics after completing their apprenticeship.

# Job Training Partnership Act Title III for Dislocated Workers

The Job Training Partnership Act Title III serves a more limited population than other programs included in this study. It is restricted to what are commonly referred to as “dislocated workers.”

Individuals are eligible if their employment has been terminated (or have received a notice of termination) due to a permanent closure or substantial layoff at a plant or facility. Individuals are also eligible for JTPA Title III if they are eligible for unemployment compensation (or have already exhausted their benefits) and have few prospects for returning to their previous occupation or industry. When considering the outcomes from one year to another, it is important to remember that a major portion of program funding is made up of individual grants (National Reserve Grants) awarded on the basis of major plant closures or layoffs. As a result, the total funding level and the specific industries served by this program fluctuate from year to year.

As in other JTPA programs, JTPA Title III offers a variety of training and employment-related services. These include occupational training, basic skills instruction, and job search assistance, such as career counseling, resume

preparation, and job referrals.

Occupational training occurs either at a training institution, such as a community or technical college, a private vocational school, or at a worksite itself. The program is administered by the Employment Security Department at the state level and by 12 Service Delivery Areas at the local level. Each Service Delivery Area is headed by a Private Industry Council, who provides services directly or purchases services from other providers in partnership with local elected officials.

At the time of our previous study of 1993–94 participants, the program was expanding in response to several factors, most notably layoffs in the aerospace industry and continuing job losses in the timber industry. However, the timing of the program expansion was such that few workers from this new wave of participants left the program in time to be included in the study. This year’s study does reflect this new wave of participants, and is, therefore, more than twice the size of the previous study’s sample. Not only did we see an influx of participants in the program, but there were significant changes in

dislocated workers' industry of origin. A major portion of the increase was from increased dislocation in the aerospace industry.

For this year's study, program records were obtained on 6,722 individuals who left JTPA Title III during the 1995 program year (July 1, 1995, to June 30, 1996).<sup>24</sup> Employment-related information was then obtained through a match with the Employment Security wage files (representing 85 to 90 percent of in-state employment). In addition, 207 former participants responded to a telephone survey conducted during the fall of 1997.

On average, participants were in the program for about 11 months. There is, however, considerable variation in the amount of time participants spend in the JTPA Title III program. Some receive only job search and/or relocation assistance, while others enroll in longer retraining programs.

## Participant Characteristics

In some ways, participants in JTPA Title III are a relatively homogenous group due to program eligibility requirements. To be eligible, participants must have received a layoff or dislocation notice from a job *to which the worker is unlikely to return*. Participants mirrored the state's racial-ethnic adult population distribution, except for Hispanics, who participated in the program half as frequently as in the state general

population. (See Figure 18.) Overall, men made up nearly two-thirds of participants (63 percent men, as opposed to 37 percent women).

At the time of the study, two-thirds of the participants were between age 25 and 44, and 22 percent were between 45 and 54. Only 6 percent did not have a high school degree or GED upon entering the program. Over one-third said they had two or more years of postsecondary education, and half of those had a baccalaureate degree.

Prior to losing their jobs, JTPA Title III participants received the highest wages of any group included in this report. Those with reported employment during the third quarter prior to enrollment had a median hourly wage of \$16.18. At that time, their median quarterly earnings were \$7,298.

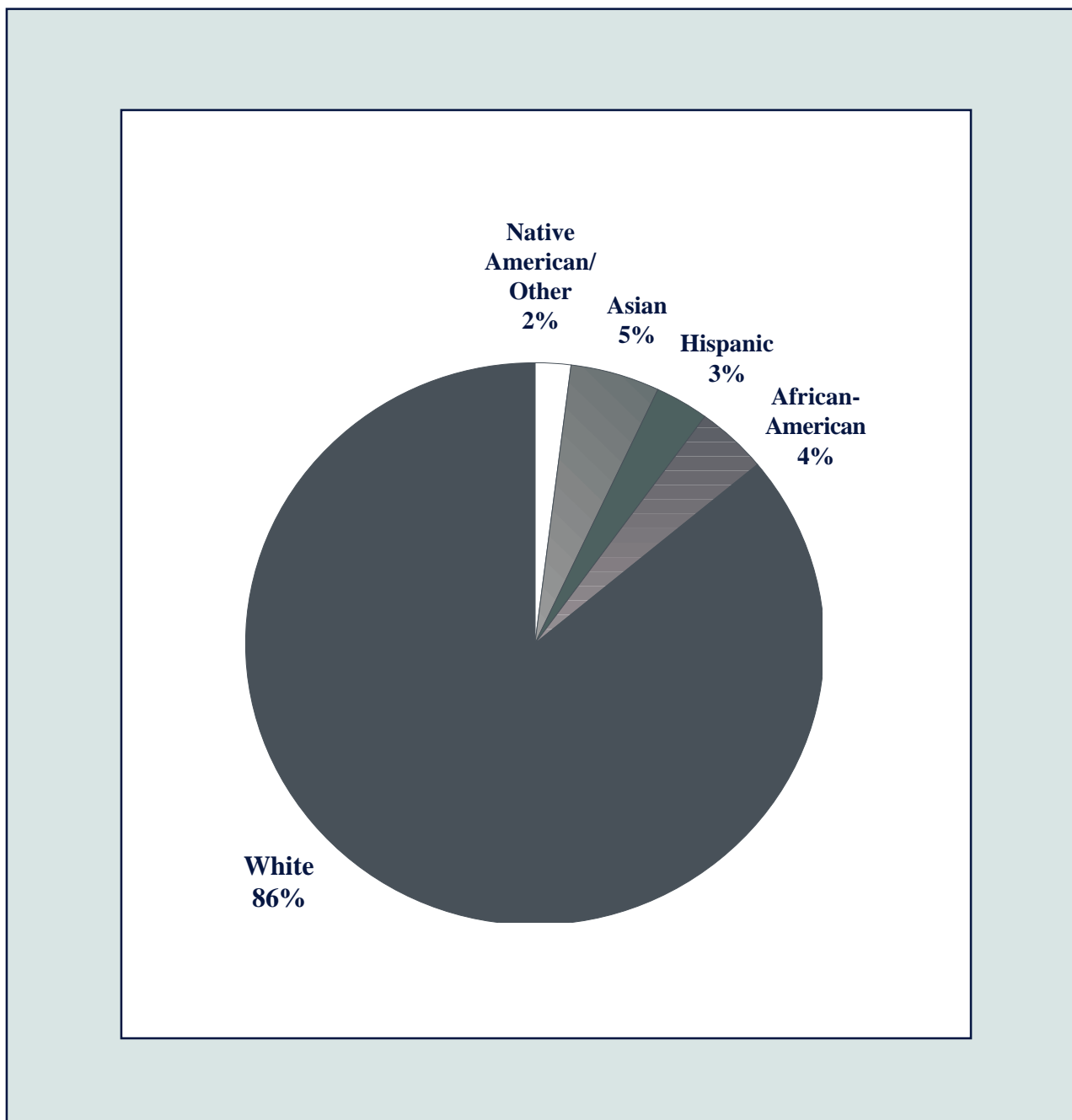
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<sup>24</sup> This group partially overlaps with dislocated workers who received training at community and technical colleges funded by the Employment and Training Trust Fund under ESHB 1988 and with dislocated workers who received extended unemployment benefits under the Timber Retraining Benefits program.

## *Characteristics of JTPA Title III Dislocated Workers*

### Race and Ethnicity

FIGURE 18



## Competency Gains

Given the purpose of the program and participant characteristics, not surprisingly, 90 percent of participants said they entered the program to acquire skills for a new job. According to the survey, 67 percent received specific job skills training. Of those, 74 percent said the training improved their skills a lot. (See Figures 19 and 20.) Sixty-two percent of participants received some computer training, and of those who received basic computer skills training, 75 percent felt these skills had improved a lot, compared to only 7 percent who thought their skills in this area did not improve at all. Consistent with their relatively high level of education, fewer than half of the participants reported receiving instruction in basic skills: 41 percent received training in writing, 40 percent in math, and 17 percent in reading. More than 47 percent of those receiving basic skills instruction said their skills improved a lot.

In general, males were more likely than females to receive training in the operation of machinery. While 36 percent of men reported receiving training in the operation of machinery as part of their program, only 26 percent of women said they had received this training. Women, on the other hand, were more likely than their male counterparts to receive computer training (80 to 49 percent, respectively).

Among those employed after the program, 59 percent of participants said their JTPA Title III training was related to their job.

## Participant Satisfaction

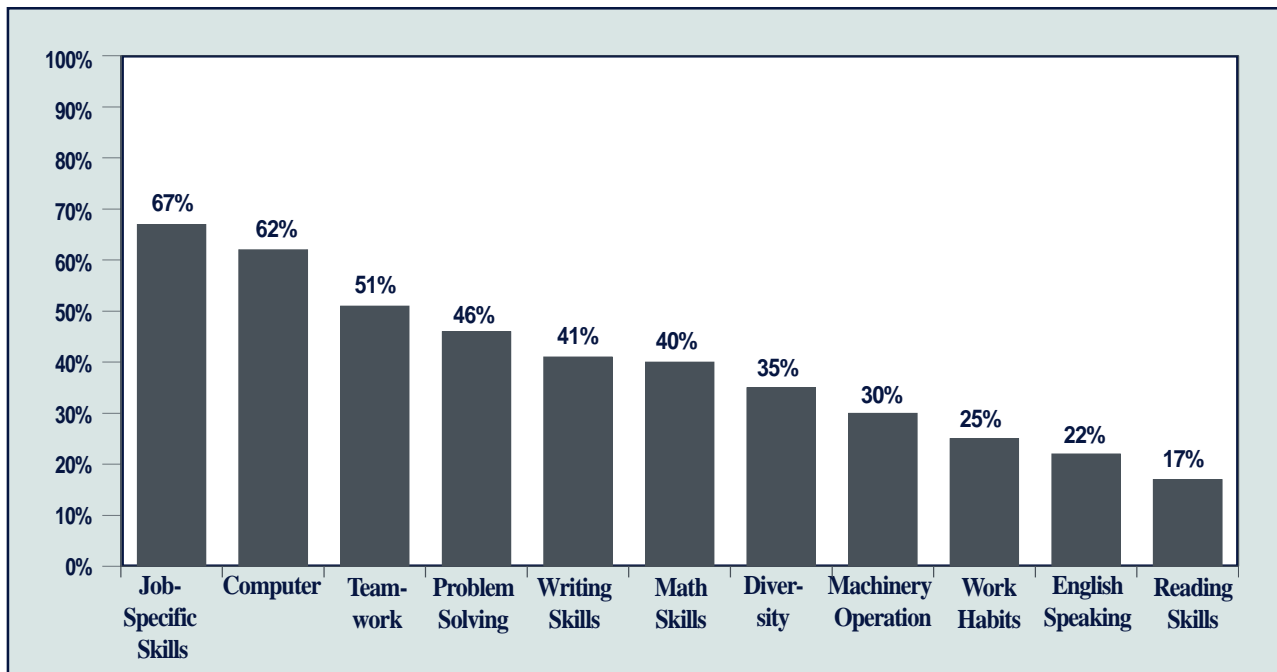
The survey results indicate that the participants were mostly satisfied with the JTPA Title III program. Eighty-four percent said that they met their educational objectives for enrolling in the program; of these, 45 percent said they definitely met their educational objectives. Sixteen percent stated they had not met their educational objectives.

A significantly higher proportion than in the previous study were both very satisfied (53 percent) and dissatisfied (18 percent) with the overall program. This represents an approximate doubling of the proportion of respondents with strong opinions about overall satisfaction at both the positive and negative ends of the spectrum. Eighty-six percent of participants reported being satisfied with the quality of the teaching (of these, 59 percent said they were very satisfied). Only 14 percent said they were dissatisfied with the quality of teaching in the program. Compared to the 1993–94 participants, the percentage of students who were very satisfied with the length of the program doubled from 25 to 50 percent. Of the 50 percent who were dissatisfied by the length of the program, 82 percent said the training was too short.

### *Training of JTPA Title III Dislocated Workers*

FIGURE 19

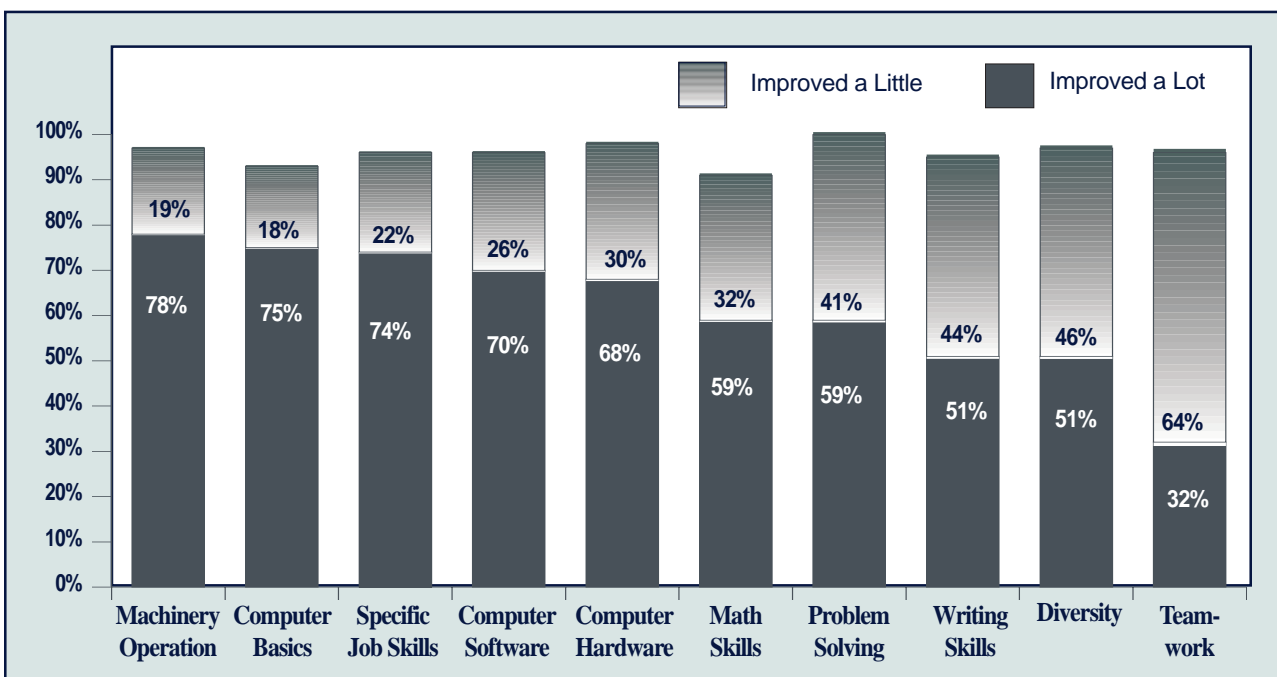
Percent of Participants Reporting Specific Skills Training



### *Percentage of JTPA Title III Participants Receiving Specific Skills Training*

FIGURE 20

*Who Reported Their Skills Improved a Little or a Lot*



The support services most frequently needed by participants were information on job openings (66 percent), financial assistance (53 percent), career or job counseling (46 percent), labor market information (41 percent), assistance with resume writing (39 percent), and job interviewing (33 percent). (See Figure 21.) About 80 percent or more of those needing financial assistance, career counseling, labor market information, and interviewing and resume writing assistance received it. However, 22 percent of participants did not have their need met for information on job openings, and 17 percent ended the program with their need for career or job counseling unmet. Women were much more likely than men to report needing child care assistance. Whereas 12 percent of females reported needing child care assistance, only 1 percent of men reported the need.

Between 1993-94 and 1995-96, there was a drop in number of participants who said they needed transportation assistance or information about government programs. In 1993-94, 22 percent reported needing transportation assistance. This number fell to 14 percent in 1995-96. Similarly, in 1993-94, about 37 percent said they needed additional information about government programs, whereas only 26 percent said they needed these services in 1995-96.

## Employer Satisfaction

It was not feasible to separately survey employers about each of the JTPA programs included in the study (Titles II-A, II-B, II-C, and III) separately because

there were too few individuals coming out of each program for a sufficient percentage of employers in the state to have had experience employing recent program participants. They were instead asked about workers who were trained “by JTPA.” This section presents findings on employer satisfaction with new employees who completed any type of JTPA program. Since relatively few employers felt they were in a position to evaluate new employees who recently completed a JTPA program, the findings on employer satisfaction should be treated with caution.

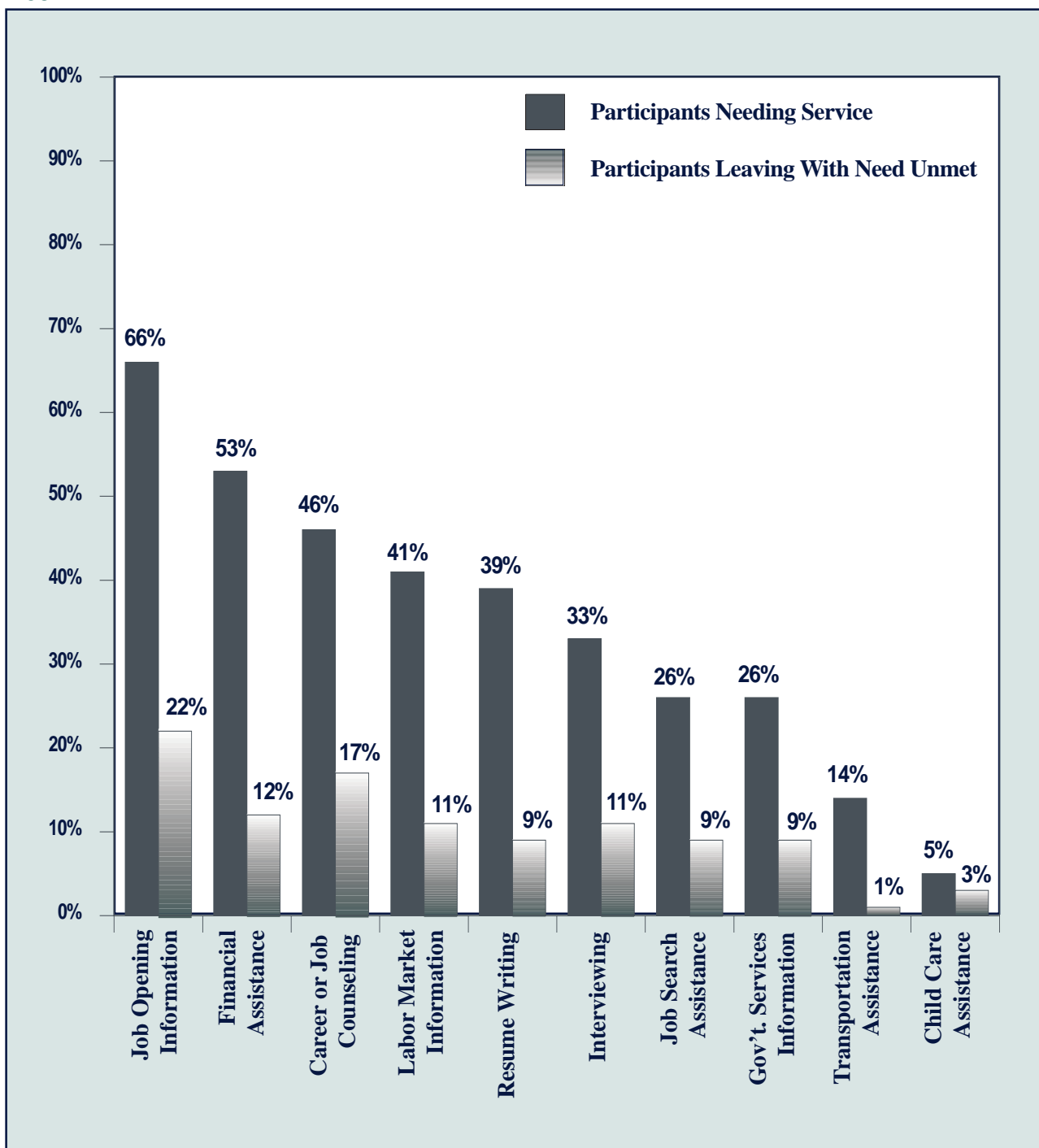
The survey asked firms to evaluate new employees who recently completed a JTPA program. Overall, the results indicate that the majority of employers were satisfied with the quality and productivity of these workers. Seventy percent of employers said they were either somewhat or very satisfied with these workers’ overall productivity. Sixty-six percent stated they were satisfied with the overall quality of work of these new employees.<sup>25</sup>

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<sup>25</sup> This response for employer satisfaction is a decline from the 1995 survey results. In 1995, 87 percent of employers said they were satisfied with the overall quality of work of such employees. The recent survey, however, used a different response scale (very satisfied, somewhat satisfied, somewhat dissatisfied, very dissatisfied; compared to very satisfied, somewhat satisfied, not very satisfied). This change may be the reason for the decline rather than any real difference in employer opinion.

## *Support Service Needs of JTPA Title III for Dislocated Workers*

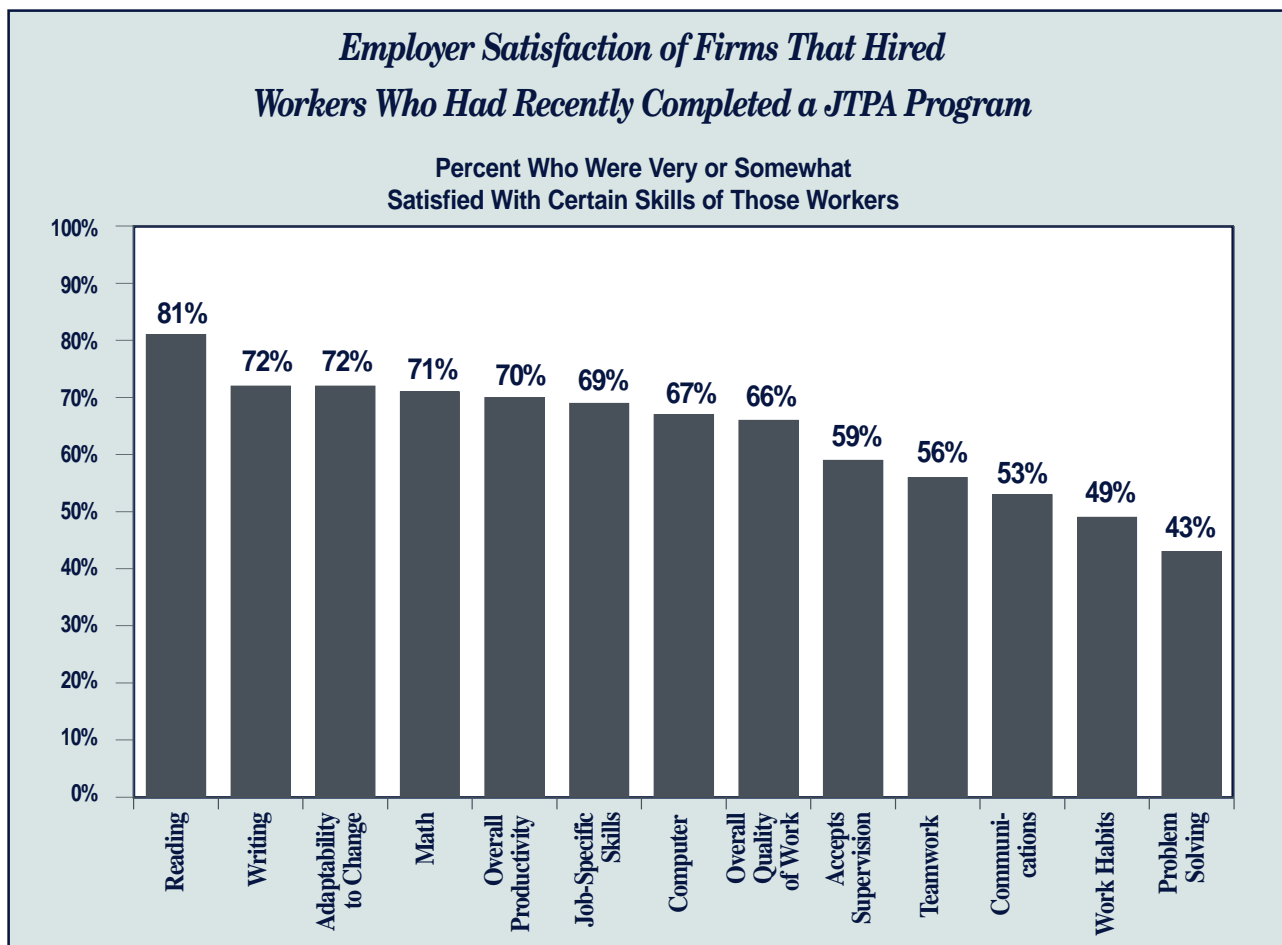
FIGURE 21



Most employers were satisfied with these new workers' reading skills (81 percent satisfied), writing skills (72 percent), adaptability to change (72 percent), math skills (71 percent,) and job-specific skills (69 percent). Sixty-seven percent of employers stated that they were satisfied with these new workers' computer skills. Employers reported less satisfaction with new workers' problem solving skills (43 percent satisfied) and communication skills (53 percent). (See Figure 22.)

These results repeat many of same areas of employer satisfaction and dissatisfaction as the 1995 survey. In both years, a majority of employers were satisfied with job-specific skills, reading, and writing. In both years, relatively fewer employers were satisfied with former participants' problem-solving skills. Fewer employers were satisfied in 1997 with these workers' communication skills and work habits; more were satisfied with their computer and math skills.

FIGURE 22



## Employment and Earnings

According to survey responses, 81 percent of the 1995-96 JTPA Title III participants had a job during the period 6 to 9 months following their program. (See Figure 23.) Rapid recovery from the aerospace industry downturn resulted in substantial rehiring by aerospace firms. When we examine the balance between the sectors in which participants formerly worked

and those in which participants found work after leaving their program, we see a net movement out of aerospace and other manufacturing fields into the trade, business services, health care, and other high-tech industries. While 38 percent of participants left the aerospace industry, 31 percent of those who found employment were in the aerospace industry.

FIGURE 23

<i>Employment and Earnings<sup>26</sup> of JTPA Title III Participants in the Third Quarter After Leaving Program</i>		
	1993-94	1995-96
Percent Self-Reporting Employment When Surveyed	84%	85%
Percent Self-Reporting Employment During the Third Quarter After Leaving Program	n/a	81%
Percent With Employment Reported by Employers to the Employment Security Department the Third Quarter After Leaving Program	70%	74%
Median Quarterly Hours Worked, of Those Working	n/a	493
Mean Quarterly Hours Worked of Those Working	439	455
Percent Employed Full-Time of Those Working ( <i>averaging 30 or more hours/week</i> )	n/a	75%
Median Quarterly Earnings of Those Working	\$5,333	\$6,309
Size of Household That Median Earnings Would Support at Poverty Level <sup>27</sup>	n/a	7.4
Size of Household That Median Earnings Would Support at Twice Poverty Level	n/a	3.7
Median Hourly Wage of Those Working	\$11.75	\$13.43

<sup>26</sup> All wages and earnings are stated in first quarter 1997 dollars.

<sup>27</sup> The federal poverty guidelines as identified by the Department of Health and Human Services.

Seventy-four percent of JTPA Title III participants were found to have employment reported to the Employment Security Department during the third quarter after they left the program (the Employment Security wage file includes 85 to 90 percent of the employment in Washington and does not include out-of-state employment). The median hourly wage for this group was \$13.43 during the third quarter after leaving the program.

Compared to two years earlier, the current study found a slightly higher rate of employment and substantially higher hourly wages and earnings. This increase in earned income may be due, at least in part, to the increase in the percentage of participants who came from and returned to the aerospace industry.

Employment and earnings varied by gender and race-ethnicity. Male participants were found to have earnings about 30 percent higher than their female counterparts, mostly due to higher hourly wages. This is, however, approximately the same gender differential that existed in male and female earnings in the third quarter before they entered the program. In other words, the program did not create gender differences in earnings, nor did the program reduce the differences. Moreover, such gender differences exist in the overall labor market, and JTPA Title III participants' extensive work history has a large impact on postprogram results.

Asian/Pacific Islander and African-American JTPA Title III participants secured higher earnings than the average JTPA Title III participant during the third quarter after they left the program. Three quarters before enrolling in the program, Asian/Pacific Islander, African-American, Hispanic and Native American participants all had wages that were lower than for the JTPA participants as a whole. However, three quarters after they left the JTPA Title III program, the wage gap for Asian/Pacific Islander, African-American and Native American participants was either reduced or eliminated. Hispanic participants, on the other hand, experienced both a gap in wages three months prior to enrollment and the lowest quarterly earnings and hourly wage rates of any racial-ethnic group three quarters after their JTPA program. This earning inequity is quite possibly explained by the fact that Hispanic participants were more likely to live in geographic areas with relatively lower wages.

In order to examine the wage distribution of former students, we divided Washington workers into quintiles based on their hourly wage. The percent of participants who had hourly wages in the third quarter postprogram in each quintile is shown below.<sup>28</sup>

The lowest 20% of Washington workers .....	6%
The second 20% of Washington workers .....	16%
The middle 20% of Washington workers .....	28%
The fourth 20% of Washington workers .....	27%
The highest 20% of Washington workers .....	23%

The third quarter after they left the JTPA Title III program, the typical (median) participant had sufficient earnings to support 7.4 persons above the poverty level. Using a higher income standard, the typical participant earned enough to support 3.7 persons at a “family wage” of twice the poverty level.

According to the survey responses, 68 percent of participants employed 9 months after the program had health benefits provided by their employer; a drop of 20 percent from the 1993-94 survey response. Thirty-eight percent

reported receiving pension benefits; a 21 percent decrease from 1993-94. At 9 months following training, 20 percent of JTPA Title III participants held a union job.

The results suggest that JTPA Title III participants had fairly positive employment and earnings outcomes, although not at the same level most had earned before dislocation, and with a substantial decrease in those who received health and pension benefits from their employer. Compared to their previous jobs, JTPA Title III participants experienced a 14 percent drop in median earnings after being dislocated. The difference in participant earnings was primarily due to lower hourly wages after dislocation; there was little difference in actual hours worked.

<sup>28</sup> The lowest quintile ranges from \$4.90 to \$6.71, the second quintile is \$6.72 to \$9.38, the third quintile is \$9.39 to \$13.43, the fourth quintile is from \$13.44 to \$20.62, and the top quintile starts at \$20.63. These values are inflation adjusted from 1995 Unemployment Insurance records.

## Areas for Improvement

JTPA Title III serves dislocated workers who, in most cases, lost a good-paying job. Six to nine months after leaving the program, most of the participants had what many would probably characterize as good wages, although for most, they were not up to the level they once had.

The last outcomes evaluation, based on 1993-94 participants, found that most participants were satisfied with the program, although certain support services could be improved, particularly assistance with job placement.

The results for the 1995-96 participants show substantially higher postprogram hourly wages and earnings compared to the 1993-94 participants. This increase may be due, at least in part, to a large increase in participants coming from and going back to the aerospace industry.

There was little change from the previous evaluation in the percentage of participants who reported receiving various types of skills training. Fewer participants left the program with their needs for support services unmet. There still is, however, a need to continue to improve information about job openings, career and job counseling, and for the relatively small number (mainly

women) who reported needing such assistance—child care. Postprogram wages were significantly lower for women than for men. Although this reflects the difference in earnings prior to starting the program and in the overall labor market, JTPA Title III might be able to do more to improve labor market outcomes for women.

# Adult Basic Skills Education

The state's 32 community and technical colleges offer basic skills education to adults whose skills are assessed at high school level or below in reading, writing, or math. The colleges provide instruction for most of the adult basic skills students in the state. This report covers only Adult Basic Skills Education at community and technical colleges. (A database is currently being developed to include participants served by other providers of Adult Basic Skills Education, such as community-based organizations.) It is also limited to adults who identified employment-related reasons for enrolling in basic skills courses and proceeded to take only basic skills courses at the colleges. Those who took basic skills courses for nonemployment-related reasons are not included in this report, nor are those who took other courses in addition to basic skills. Nine percent of all adult basic skills students continue on to a vocational or academic transfer program at a community or technical college.<sup>29</sup>

Adult Basic Skills Education includes courses in four categories:

1. Adult Basic Education provides remediation in reading, writing, and mathematics for adults whose skills are at or below the eighth grade level.
2. English-as-a-Second Language provides nontransfer-level instruction at competency levels ranging from beginning to advanced.
3. GED Test Preparation provides instruction in basic academic skills beyond Adult Basic Education for those students whose goal is to pass the high school equivalency examination.
4. High School Completion provides instruction in high school courses for adults who want to earn an adult high school diploma.

For this year's study, participant records were obtained for 10,816 adults who left an Adult Basic Skills program during the 1995–96 school year and did not return to a community or technical college for at least a year. Their median length of enrollment was two quarters. Employment-related information was obtained from a match with the Employment Security Department files of wages reported to Employment Security (85 to 90 percent of in-state employment). In addition, 203 former basic skills students completed the telephone survey during the fall of 1997. The survey sample excluded English-as-a-Second Language students due to the lack of funds for interpreters.

<sup>29</sup> The focus on those participants who enrolled in Adult Basic Skills for employment-related reasons is a change from the previous outcome evaluation based on 1993-94 participants. The earlier outcome evaluation reported on all students who left Adult Basic Skills during that period, regardless of their purpose for enrolling.

## Participant Characteristics

Adult Basic Skills Education students are more diverse and have less education and lower income than either the state general population or other community and technical college students. Not surprisingly, of those with a recorded education level when entering the program, half did not have a high school diploma or GED, compared to 17 percent of Washington State adults 18 years of age or older. About 34 percent did have a diploma or GED, and a further 13 percent had attended some college.

We conducted a record match with the Washington State Employment Security Department wage file (which includes between 85 to 90 percent of the employment in Washington and does not include out-of-state employment) in order to determine wage and employment data for Adult Basic Skills Education students. In the third quarter before program enrollment, only 37 percent had employment reported to the Employment Security Department. The median wage for this group was \$7.16 per hour, the second lowest wage among the programs we studied that serve adults. Although these adults earned a low hourly rate, they tended to work a substantial number of hours, resulting in median quarterly earnings of \$2,646. The low hourly wages prior to enrollment could be partially due to the substantial percentage who worked in agriculture and food processing.

Fifty-seven percent of the adult basic skills students were people of color (compared to 15 percent of the state

population). Twenty-nine percent were Hispanics, 16 percent Asian/Pacific Islander, 8 percent African-American, and 4 percent Native American. (See Figure 24.) Proportionately, Hispanics and Asian/Pacific Islanders participated at the heaviest rates, given their state population. The numbers of males and females were approximately equal. Fifteen percent were younger than 20 years of age, 53 percent of the students were 20 to 34 years of age, and 20 percent were 35 to 44 years of age.

Of those with reported employment 3 quarters before their program, about half were in a service industry or retail or wholesale trade, and 23 percent were in agriculture or food processing.

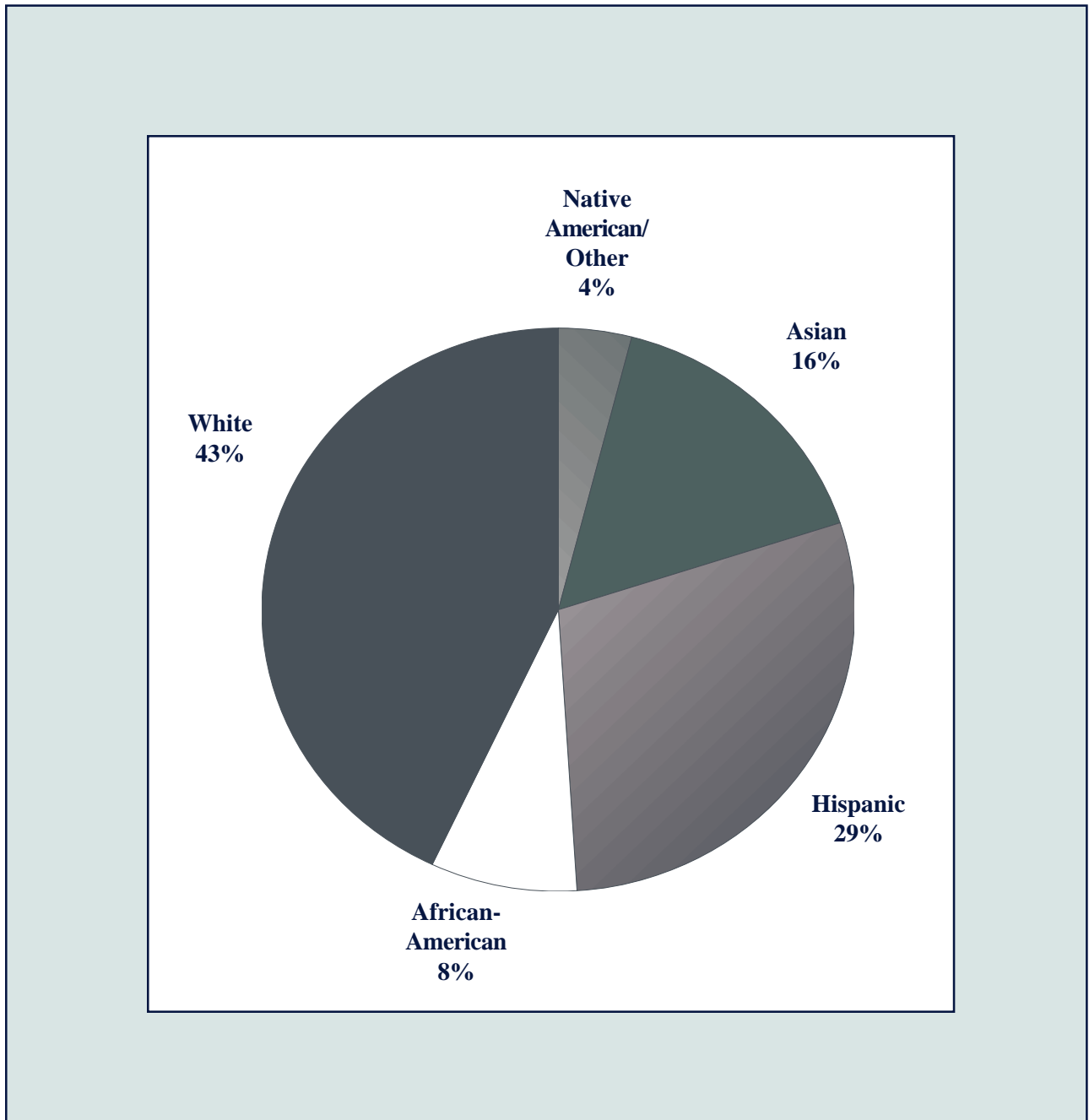
## Competency Gains

Based on the survey results, 94 percent of basic skills students entered the program to improve their skills or confidence in math, reading, or English speaking. In general, male basic skills students were more likely than their female counterparts to report enrolling in the program to improve their skills for a current job (39 to 21 percent, respectively). Students of color were more likely than white students to report enrolling in a basic skills program to improve their reading skills (68 to 35 percent of white students), math skills (75 to 54 percent), English ability (63 to 42 percent), and confidence in basic skills (92 to 75 percent).

# *Characteristics of Adult Basic Skills Students*

## **Race and Ethnicity**

FIGURE 24



When surveyed during the fall of 1997, 62 percent said they received instruction in math, 59 percent received instruction in writing, and 40 percent received instruction in using computers. (See Figure 25.) Approximately half of the students who recalled receiving instruction in writing or math said that these skills improved a lot (an additional 49 and 39 percent of those who received training in writing and math, respectively, indicated that their skills had improved a little). (See Figure 26.) More than half (53 percent) of those who received training in computer basics felt that their skills improved a lot. In general, women were more likely than their male counterparts to receive computer training. Forty-nine percent of female students reported receiving computer training, as opposed to 31 percent of male students.

Among those employed 3 quarters after leaving the program, 53 percent said their job was related to the basic skills training they received. In response to a different question, about one-third said they never used the skills they learned on their job.

Three quarters of the former basic skills students expressed an interest in additional training. Of those students, 91 percent wanted more computer training, 75 percent wanted additional writing skills, 74 percent math, and 64 percent reading.

## Participant Satisfaction

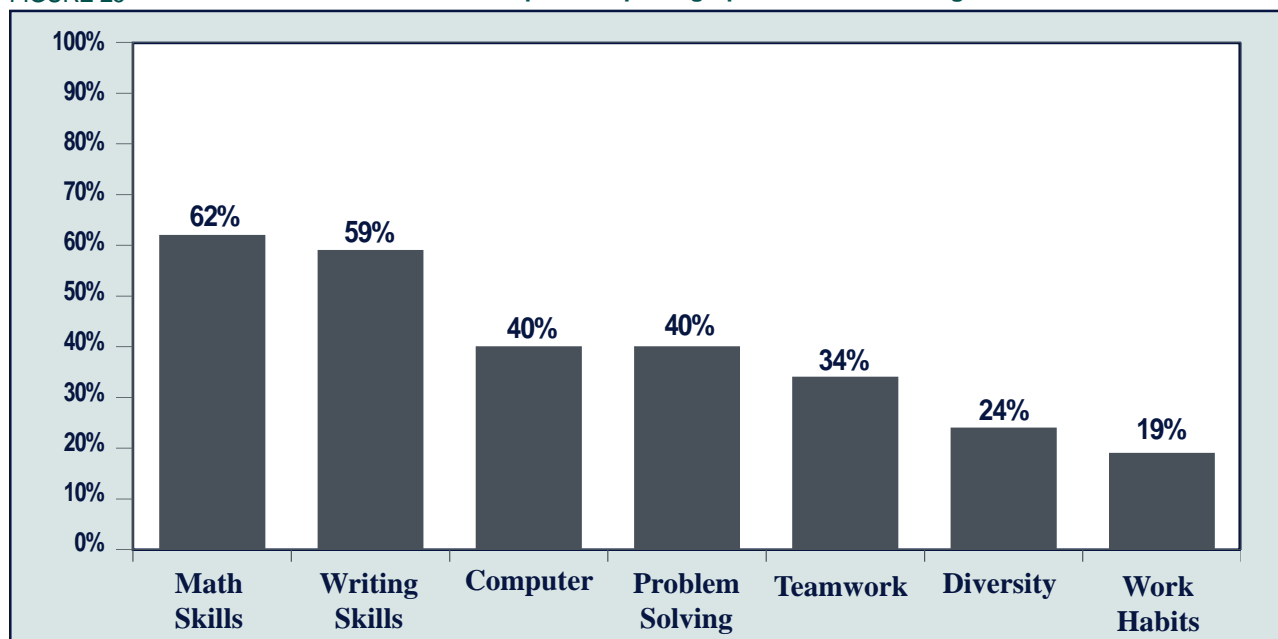
In general, students said they were satisfied with the basic skills training they received. In fact, 90 percent of former students reported being satisfied with their basic skills instruction overall, and 84 percent stated that they had met their educational objectives. Only 15 percent said their educational objectives had not been met by the training. The students were more likely to say, however, that their objectives were partially met (49 percent) rather than definitely met (35 percent).

When asked about support services, students reported most frequently needing information on job openings (needed by 48 percent), resume writing (38 percent), financial assistance (36 percent), career counseling (33 percent), job interviewing (33 percent), job search information (30 percent), and information about other government programs (27 percent). With the exception of those who needed information about other government services, 51 to 63 percent of the participants who reported needing services received it. And of those, 80 to 98 percent reported that the service met their needs. According to survey responses, 15 to 28 percent of the students who needed the following services left the program with their needs unmet: information on job openings (28 percent), resume writing (18 percent), career or job counseling

### *Training of Adult Basic Skills Program Participants*

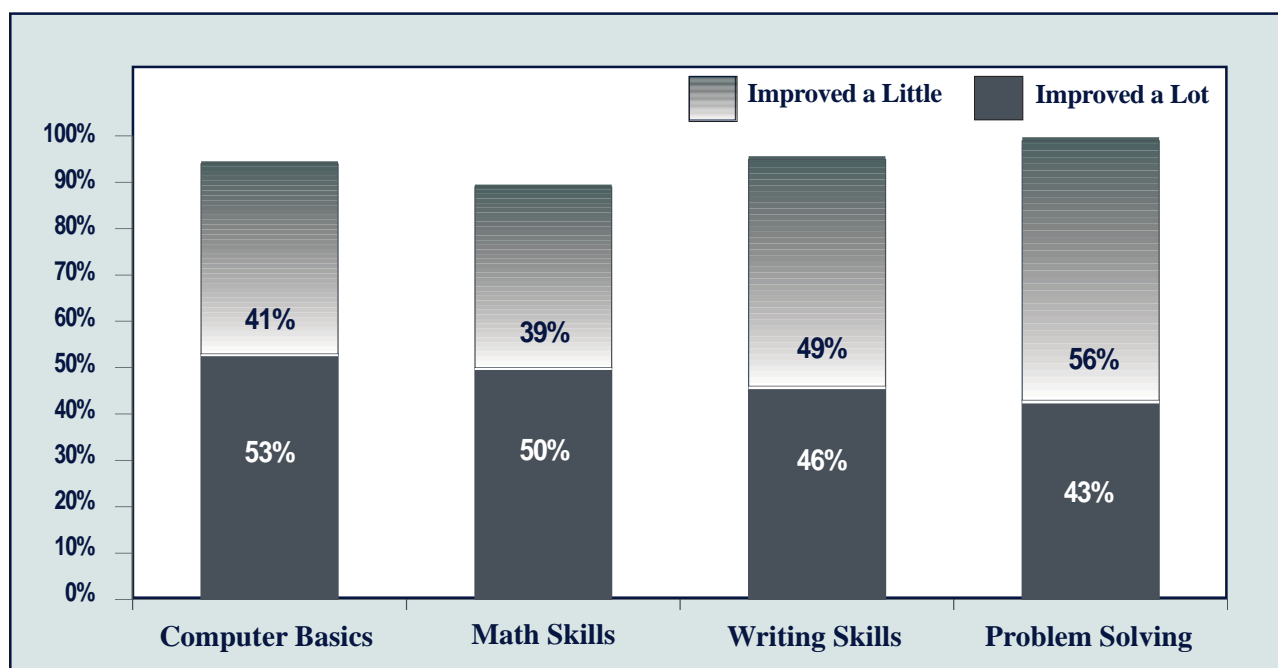
FIGURE 25

Percent of Participants Reporting Specific Skills Training



### *Percentage of Adult Basic Skills Participants Receiving Specific Skills Training Who Reported Their Skills Improved a Little or a Lot*

FIGURE 26



(17 percent), information about government services (17 percent), financial assistance (17 percent), job interviewing (16 percent), and job search assistance (15 percent). (See Figure 27.)

The need for services varied by gender and race ethnicity. In general, female students reported needing more financial assistance than their male counterparts (47 percent of women and 22 percent of men). Both women and students of color were more likely to report needing child care assistance than their male or white counterparts. Whereas, 32 percent of women and 26 percent of students of color reported needing assistance with child care, only 5 percent of men and 14 percent of white students reported a similar need.<sup>30</sup> Students of color were also more likely than white students to state they needed resume writing assistance (47 to 30 percent, respectively).

## Employer Satisfaction

The employer survey asked firms to evaluate new employees who had recently completed an Adult Basic Skills Education program at a community or technical college or a community-based organization. Seventy percent of employers stated that they were satisfied with the overall quality of work of these new employees.<sup>31</sup> Sixty-eight percent of employers said they were either somewhat or very satisfied with workers' overall productivity. (See Figure 28.)

The majority of employers reported they were satisfied with these new workers' reading skills (73 percent satisfied), adaptability to change (64 percent), ability to accept supervision (63 percent), and job-specific skills (62 percent). Fewer employers reported satisfaction with new workers' computer skills (38 percent satisfied), communication skills (38 percent), problem solving skills (45 percent), writing skills (47 percent), and math skills (47 percent). (See Figure 28.)

These results roughly reflect some of the same areas of relative employer satisfaction and dissatisfaction as found by the 1995 survey, though variations exist. In both years, relatively fewer employers were satisfied with former students' computer and math skills. The current survey found substantially lower satisfaction with communication, problem solving, and writing skills.

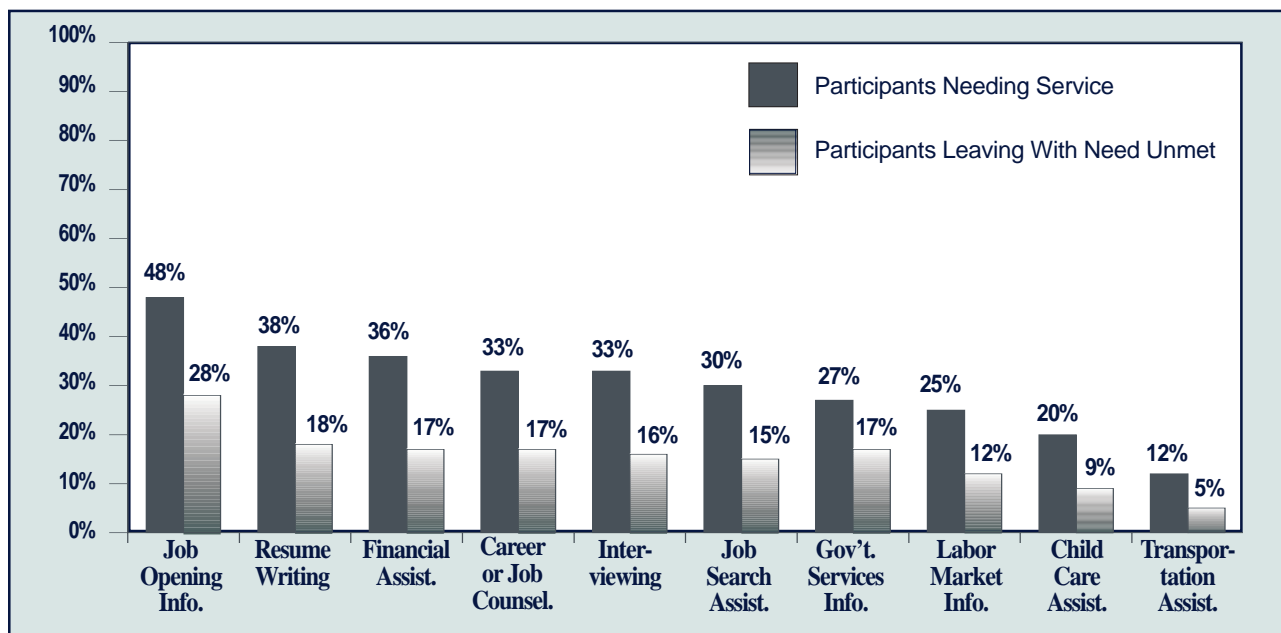
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<sup>30</sup> Each individual participant is a member of both a gender group and race-ethnicity group. However, the differences in the percentage of women across race-ethnicity groups in this example is not the major cause of the racial-ethnic differences.

<sup>31</sup> This employer satisfaction response is a decline from the 1995 survey results. In 1995, 87 percent of employers said they were satisfied with the overall quality of work of such employees. The recent survey, however, used a different response scale (very satisfied, somewhat satisfied, somewhat dissatisfied, very dissatisfied; compared to very satisfied, somewhat satisfied, not very satisfied). This change may be the reason for the decline rather than any real difference in employer opinion.

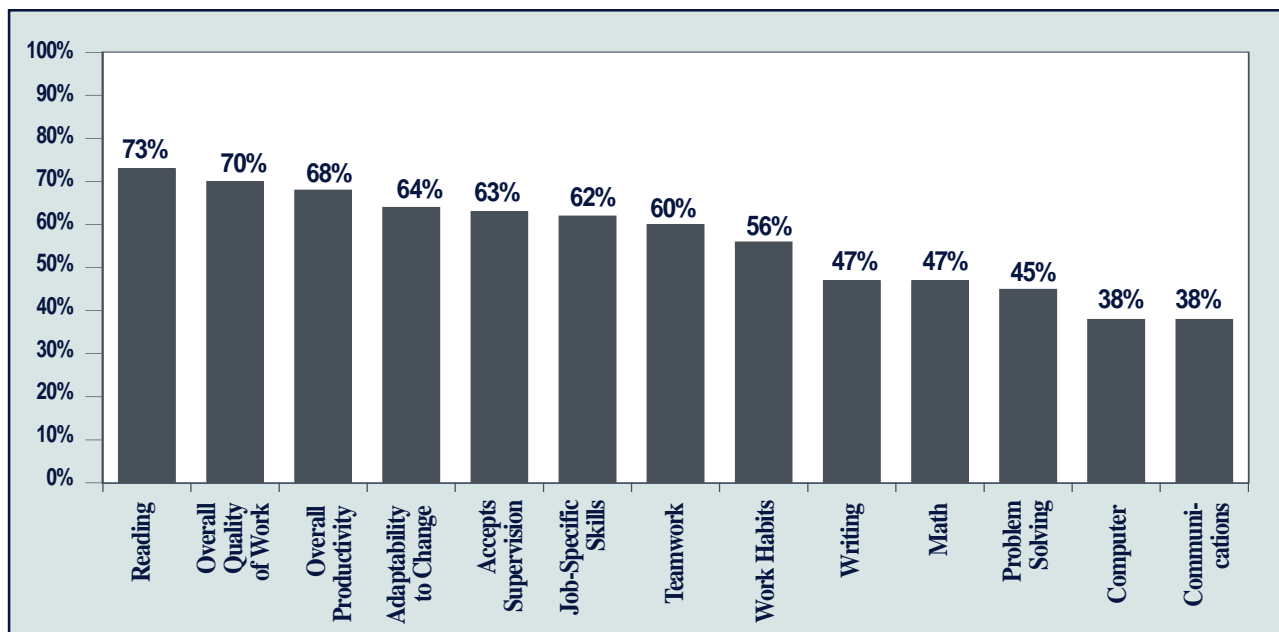
### *Support Service Needs of Adult Basic Skills Students*

FIGURE 27



### *Employer Satisfaction of Firms That Hired Workers Who Had Recently Completed an Adult Basic Education Program at a Community or Technical College or Community-Based Organization*

FIGURE 28 Percent Who Were Very or Somewhat Satisfied With Certain Skills of Those Workers



## Employment and Earnings

According to survey responses, 59 percent of the 1995-96 basic skills students were employed during the period 6 to 9 months after leaving their program. (See Figure 29.) Compared to employment before enrollment, the pattern of industry employment shifted with fewer employed in agriculture or food processing.

According to record matches, 49 percent of basic skills students had employment reported to the Employment Security Department during the third quarter after they left the program. (The Employment Security Department wage file includes

between 85 to 90 percent of employment in Washington and does not include out-of-state employment). Based on record matches, the median wage for these students 6 to 9 months after they left the program was \$7.54 per hour.

As in other programs, earnings varied by gender and race-ethnicity. Based on survey results, men were more likely than women to have a job 9 months following their basic skills training (69 to 50 percent). According to record matches, 52 percent of men had employment reported to the Employment Security Department, compared to 46 percent of women.

FIGURE 29

### *Employment and Earnings<sup>32</sup> of Adult Basic Skills Students in the Third Quarter After Leaving Program*

	1993-94	1995-96
Percent Self-Reporting Employment When Surveyed	n/a	59%
Percent Self-Reporting Employment During the Third Quarter After Leaving Program	n/a	59%
Percent With Employment Reported by Employers to the Employment Security Department the Third Quarter After Leaving Program	45%	49%
Median Quarterly Hours Worked, of Those Working	416	419
Mean Quarterly Hours Worked of Those Working	380	380
Percent Employed Full-Time of Those Working ( <i>averaging 30 or more hours/week</i> )	n/a	54%
Median Quarterly Earnings of Those Working	\$3,061	\$3,031
Size of Household That Median Earnings Would Support at Poverty Level <sup>33</sup>	n/a	2.6
Size of Household That Median Earnings Would Support at Twice Poverty Level	n/a	1.3
Median Hourly Wage of Those Working	\$7.61	\$7.54

<sup>32</sup> All wages and earnings are stated in first quarter 1997 dollars.

<sup>33</sup> The federal poverty guidelines as identified by the Department of Health and Human Services.

Among those who worked, women earned about 10 percent less per hour than men and worked about 15 percent fewer hours. This resulted in male median earnings greater than 20 percent above comparable female earnings.

Based on record matches, Asian/Pacific Islander students were found to have the highest hours, wage rates, and earnings (by more than 20 percent) of any racial-ethnic group. Native Americans had the lowest employment rate, 8 percent below the next lowest rate for any racial-ethnic group. In addition to a low employment rate, Native American students also had the lowest hourly wage and hours worked, resulting in median quarterly earnings that were half the median quarterly earnings for all former participants. African-American students had the second fewest hours of employment (nearly 25 percent fewer than former participants as a whole).

In order to examine the wage distribution of former students, we divided Washington workers into quintiles based on their hourly wage. The percent of participants who had hourly wages in the third quarter postprogram in each quintile is shown below.<sup>34</sup>

The lowest 20% of  
Washington workers ..... 34%

The second 20% of  
Washington workers ..... 39%

The middle 20% of  
Washington workers ..... 17%

The fourth 20% of  
Washington workers ..... 2%

The highest 20% of  
Washington workers ..... 3%

The third quarter after they left their basic skills program, the typical (median) participant had sufficient earnings to support a household of 2.6 persons above the poverty level. Using a higher income standard, the typical participant earned enough to support 1.3 persons at a “family wage” of twice the poverty level.

According to the survey responses, 52 percent of those employed nine months after their training had health benefits provided by their employer, and 37 percent had pension benefits. Seventeen percent reported employment covered by a union. In addition, one-third of the former basic skills students reported receiving some form of public assistance during the last 12 months (either Aid to Families with Dependent Children or Food Stamps).

<sup>34</sup> The lowest quintile ranges from \$4.90 to \$6.71, the second quintile is from \$6.72 to \$9.38, the third quintile is from \$9.39 to \$13.43, the fourth quintile is from \$13.44 to \$20.62, and the top quintile starts at \$20.63. These values are inflation adjusted from 1995 Unemployment Insurance wage records.

### ***Areas for Improvement***

The evaluation considered primarily Adult Basic Skills Education students at community and technical colleges who enrolled for a work-related reason and did not also participate in vocational training. Students in Adult Basic Skills Education tended to be less educated and poorer than other community and technical college students. Consideration of the results should take into account these programmatic and demographic limitations.

Overall, the survey responses suggest that most students were satisfied with the program, but a substantial minority of students were only somewhat satisfied, and almost half said their basic skills improved a little rather than a lot. Also, more students said the program partially met their objectives than those who said the program definitely met their objectives.

Areas that students tended to be relatively less satisfied with were educational counseling and usefulness of the instruction to their career. Among those employed after leaving the program, about one-third said they never used the skills they learned on their job.

Employers who have hired recent completers of Adult Basic Skills programs tended to agree that many could use further improvement in their skills, especially communication and basic skills. Less than half of the employers were satisfied with the completers' writing, math, and communication skills.

In addition to greater improvement in basic skills, more could be done to integrate work skills in Adult Basic Skills Education. Forty percent or fewer of the students reported receiving training in computer skills, problem solving, teamwork, or good work habits, and 60 percent or fewer employers were satisfied with these skills.

Student survey responses also show a need for wider access to support services. For each type of support service, most students who received the service reported that it met their needs, however, generally between 40 and 50 percent of students needing each type of support service said they did not receive the service.

Employment rates were somewhat higher in this evaluation compared to the results reported two years ago, although there was a very small decline in earnings and wages among those who were employed. Women had lower employment rates, earnings, and hourly wages than did men. And, Native Americans also had lower employment rates, earnings, and hourly wages than did other groups.

Although some of these findings are not directly comparable to the previous evaluation based upon the 1993-94 participants, because the more recent student survey was limited to students who enrolled for work-related reasons, the previous evaluation came to much the same conclusion as to the areas for improvement. Both evaluations show there is a need for substantial program improvement.

# Job Training Partnership Act Title II-A for Adults

The Job Training Partnership Act Title II-A program serves low-income adults, age 22 and older, who experience significant barriers to school or employment. Though the program targets low-income adults, up to 10 percent of Title II-A participants can exceed the low-income criteria if they have other barriers, including low levels of literacy, dropping out of high school, a criminal record, or receipt of public assistance. When considering the outcomes of JTPA Title II-A participants, it is important to remember that the program targets low-income populations.

JTPA Title II-A offers participants a variety of training and employment-related services. Participants may be given specific occupational training, basic skills instruction, and job search assistance, such as career counseling, resume preparation, and job referrals. Occupational training occurs either at a training institution, such as a community or technical college, a private vocational school, or at a worksite itself. The program is administered by the Employment Security Department at the state level and by 12 Service Delivery Areas at the local level. Each Service Delivery Area is headed by a Private Industry Council, who either provides services directly, or purchases services from other providers, in partnership with local elected

officials. JTPA services are often part of a “package” of employment and other services that assist an individual and that draw on multiple funding sources. The programs are often of relatively short duration, and the median length of participant enrollment is six months.

For the study, participant records were obtained on 3,555 adults who left the program during the 1995 program year (July 1, 1995, to June 30, 1996). Employment-related information was then obtained through a match with the unemployment insurance wage files for those participants with employment reported to the Employment Security Department (representing 85 to 90 percent of in-state employment). In addition, 165 former participants responded to an in-depth telephone survey conducted during the fall of 1997. Participants who received JTPA Title II-A assessment services but did not participate in other program activities are not included in the findings.<sup>35</sup>

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<sup>35</sup> The previous report on 1993–94 participants included those whose participation was limited to assessment services only. Any comparisons made here with the 1993–94 results is based on data that either includes or excludes assessment-only participants from both years.

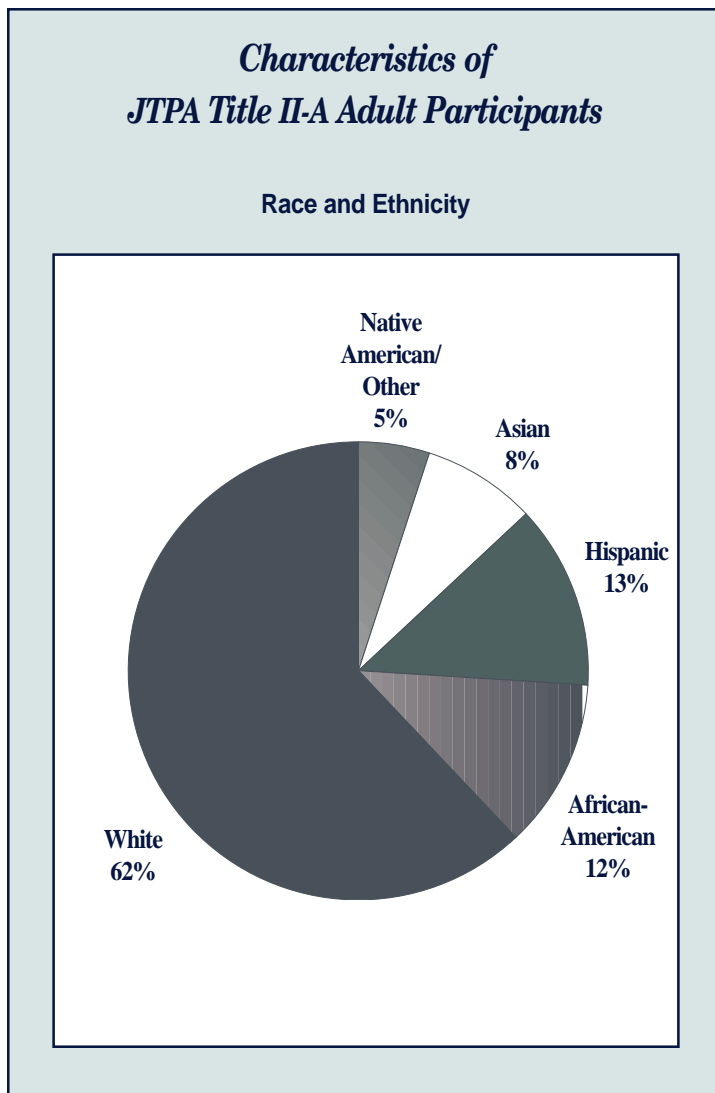
## Participant Characteristics

Participants in JTPA Title II-A are more likely to be poor, a member of a racial or ethnic minority group, female (by nearly two-thirds), and have less education than the state general population. The state's poverty population differs from the overall population in the same ways.

Whereas, 17 percent of Washington State adults 18 years of age or older do not possess a high school degree or a GED, considerably more JTPA Title II-A participants (31 percent) had not completed grade 12 when they entered the program. Thirty-eight percent of the participants studied were people of color (compared to 16 percent of the state population). Twelve percent were African-American, 13 percent were Hispanic, and 8 percent were Asian/Pacific Islander. (See Figure 30.) Sixty-five percent of the participants were women. Most participants were between the ages of 17 and 37, with the highest participation rates in the early- and mid-20s.

Only 35 percent of JTPA Title II-A participants had employment reported to the Employment Security Department in the third quarter before enrolling in JTPA. Among those who were employed, the hourly median wage during the third quarter prior to program enrollment was \$6.77, the lowest median wage of any program serving adults we studied. This disparity reflects the low income (and barriers to employment) that JTPA Title II-A participants experience.

FIGURE 30

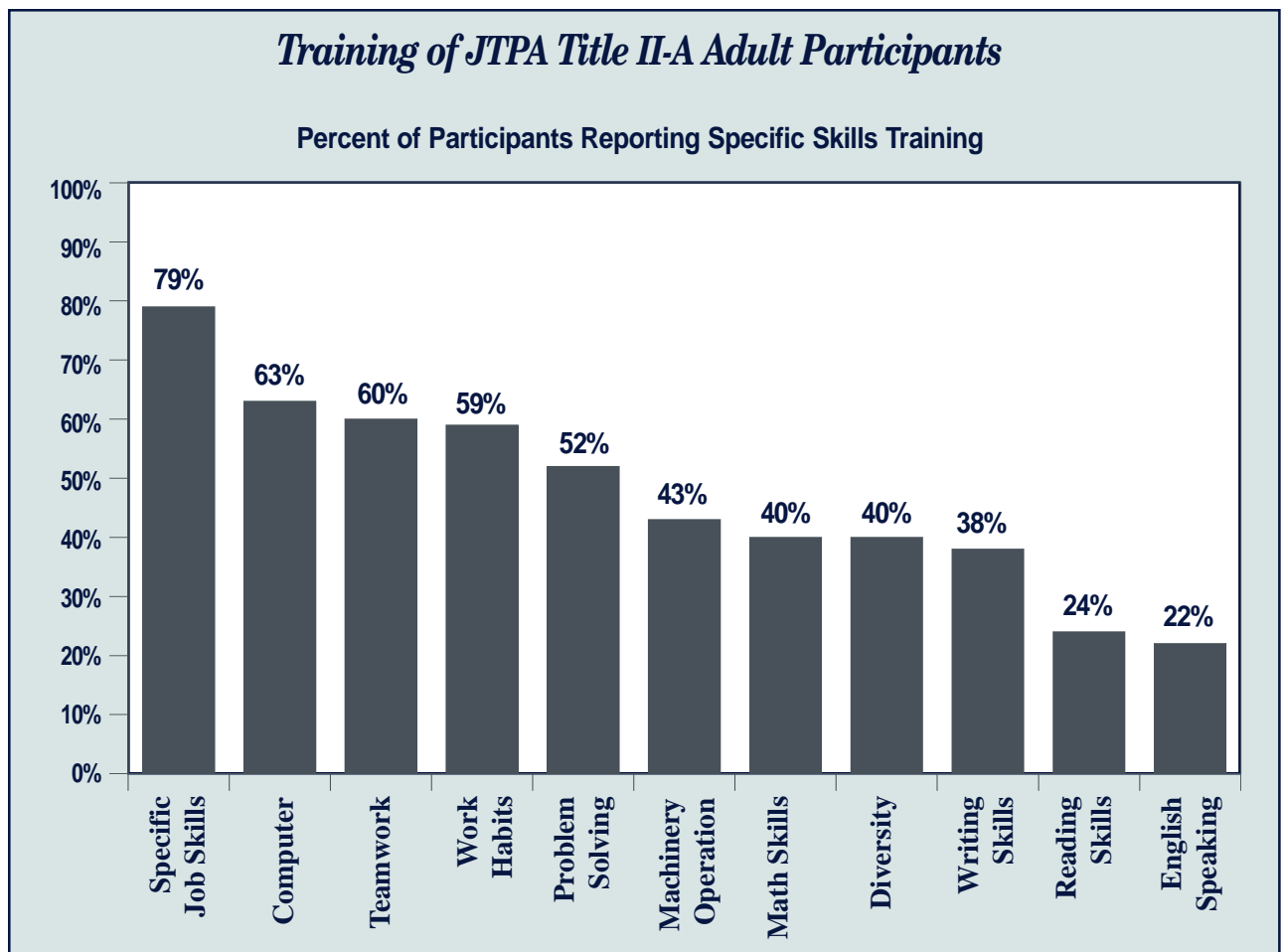


## Competency Gains

Based on the survey results, 84 percent of JTPA Title II-A participants entered the program in order to become more marketable and get a new job. A little over half of the participants (55 percent) said that one of their purposes in entering the program was to gain confidence in basic skills, such as math and reading.

More than half of the participants reported that they received occupational or workplace training, such as: skill training for a specific job (79 percent), computer training (63 percent), teamwork (60 percent), work habits (59 percent), and problem solving (52 percent). However, fewer than half of the participants indicated that they received instruction in basic skills: 40 percent received math instruction, 24 percent received reading instruction, and 38 percent received training in writing. (See Figure 31.)

FIGURE 31



In all, the results suggest that JTPA Title II-A participants who received training generally felt that it improved their skills. (See Figure 32.) Forty-two to seventy-two percent of participants who received training in a specific skill area reported that the skill improved a lot as a result; only 9 percent or less reported that their skill improved not at all.

Among those employed 9 months after they left training, 75 percent said their training was related to that job. A substantial percentage of JTPA Title II-A participants were continuing their education the school year following the training. Based on computer matches, almost 11 percent were found to be enrolled in a community or technical college program during the third quarter after leaving JTPA Title II-A training.

Additional information on participant competencies is presented below in the section on employer satisfaction.

## Participant Satisfaction

Survey results indicate that the participants were mostly satisfied with the JTPA Title II-A program. Fifty-six percent stated that the program definitely met their educational objectives compared to only 12 percent who said that their objectives were not met at all. Sixty-six percent of participants reported they were very satisfied with the overall quality of the program, 63 percent were very satisfied with the quality of the teaching, and 58 percent with the training facilities. Fifty-nine percent said their training was very useful to their career; only 14 percent

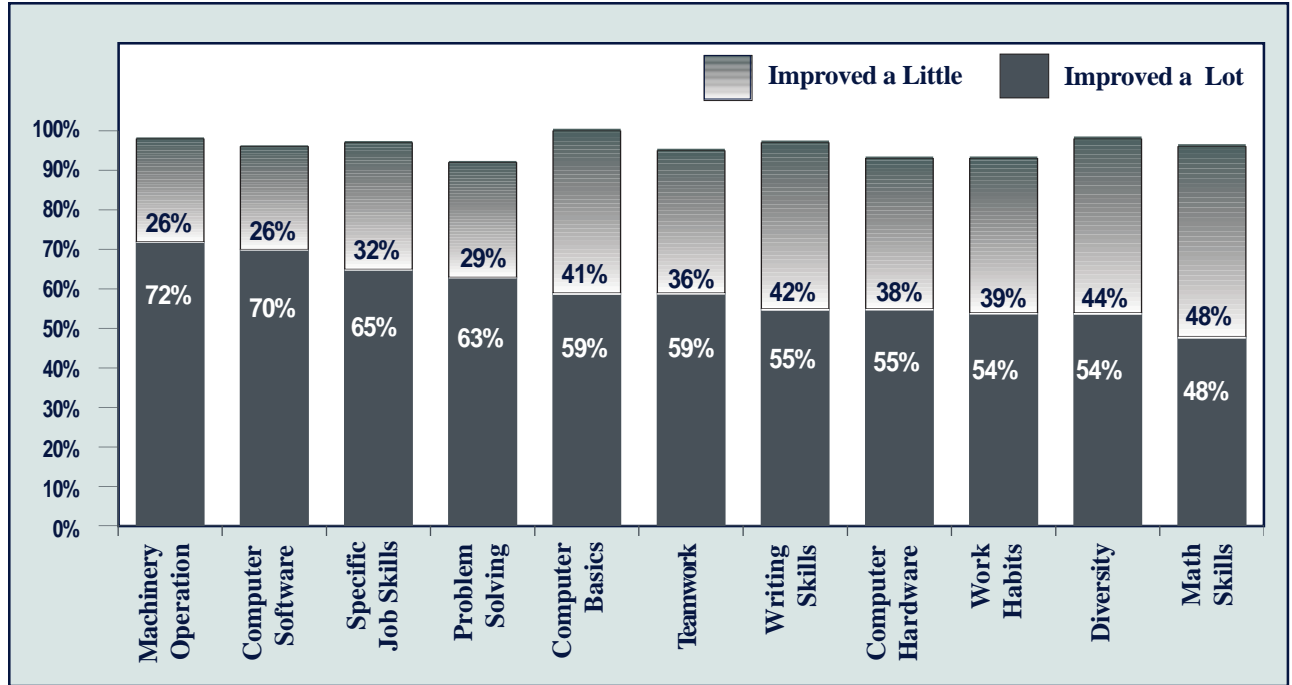
reported dissatisfaction with the usefulness of the training to their career. None of the participants surveyed were very dissatisfied with the program as a whole.

As stated above, JTPA Title II-A offers participants a variety of employment-related services in addition to basic skills and occupational training. Based on survey results, most of the participants who needed employment and support services received assistance in these areas. By an overwhelming majority, participants reported that their needs had been met by the employment and support services provided.

Participants most frequently reported needing assistance with information on job openings (73 percent), financial assistance (64 percent), resume writing (55 percent), job interviewing (49 percent), labor market information (44 percent), and career or job counseling (40 percent.) (See Figure 33.) Eighty-two to ninety-three percent of those needing the above services received the services, and 83 to 95 percent indicated that their need was met by the service. Participants reported the highest unmet need in regard to information on job openings, 21 percent left the program with their needs in this area unmet. Fifteen percent left with their need for financial assistance unmet. Only 30 percent needed information about government services, but 40 percent of those either didn't receive the information, or it was insufficient to meet their needs. Women expressed a significantly greater need for child care assistance than men (41 to 7 percent, respectively). Overall, the levels of service and participant satisfaction were higher than the previous study of 1993–94 participants.

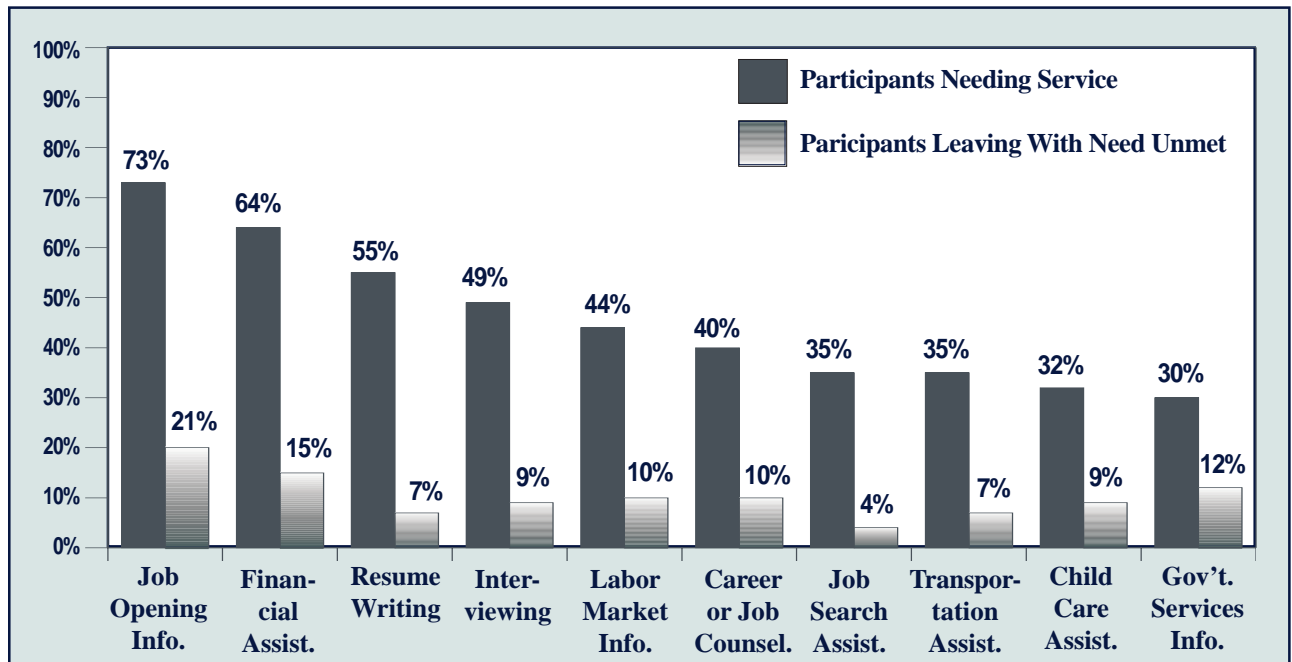
*Percentage of JTPA Title II-A Adult Participants Receiving Specific Skills Training Who Reported Their Skills Improved a Little or a Lot*

FIGURE 32



*Support Service Needs of JTPA Title II-A Adult Participants*

FIGURE 33



## Employer Satisfaction

It was not feasible to ask employers about each of the four JTPA programs included in the study (JTPA Titles II-A, II-B, II-C, and III) separately. Employers were instead asked about workers who had been trained “by JTPA.” This section presents findings on employer satisfaction with new employees who completed any type of JTPA program. Also, relatively few employers felt they were in a position to evaluate new employees who had recently completed a JTPA program. For these reasons, the findings on employer satisfaction should be treated with caution.

The employer survey asked firms to evaluate new employees who had recently completed a JTPA program. Overall, the results indicate that most employers were satisfied with the quality and productivity of these workers. Seventy percent of employers said they were either somewhat or very satisfied with workers’ overall productivity. Sixty-six percent said they were satisfied with the overall quality of work of these new workers.<sup>36</sup> (See Figure 34.)

Most often rated high were new workers’ reading skills (81 percent), writing skills (72 percent), adaptability to change (72 percent), and math skills (71 percent). Sixty-seven percent of employers stated that they were satisfied

with these new workers’ computer skills. Employers reported less satisfaction with new workers’ problem solving skills (43 percent) and communication skills (53 percent).

These results roughly reflect the same relative areas of employer satisfaction and dissatisfaction as the 1995 survey, though variations exist. In both years, a majority of employers were satisfied with job-specific skills, reading, and writing. In both years, relatively fewer employers were satisfied with former participants’ problem solving skills.

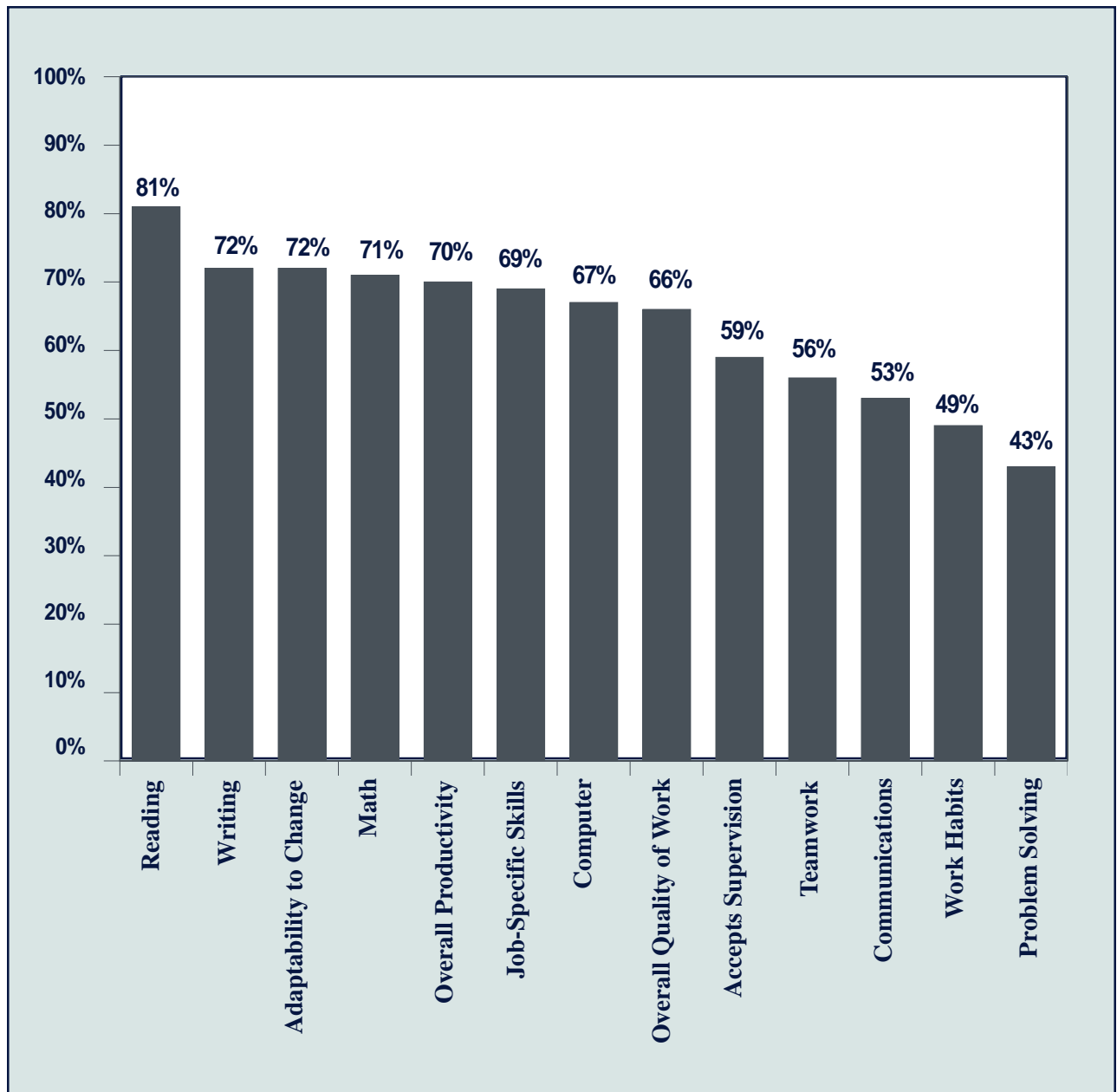
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<sup>36</sup> This response for employer satisfaction is a decline from the 1995 survey results. In 1995, 87 percent of employers said they were satisfied with the overall quality of work of such employees. The recent survey, however, used a different response scale (very satisfied, somewhat satisfied, somewhat dissatisfied, very dissatisfied; compared to very satisfied, somewhat satisfied, not very satisfied). This change may be the reason for the decline rather than any real difference in employer opinion.

## *Employer Satisfaction of Firms That Hired Workers Who Had Recently Completed a JTPA Program*

**Percent Who Were Very or Somewhat  
Satisfied With Certain Skills of Those Workers**

FIGURE 34



## Employment and Earnings

Eighty-one percent of the 1995–96 JTPA Title II-A participants reported being employed during the period six to nine months after the program. (See Figure 35.) Sixty-one percent of JTPA Title II-A participants had employment reported to the Employment Security Department during the third quarter after they left the program. This is about a 4 percent increase

over the record match employment rate found for 1993–94 participants. (The Employment Security Department wage file includes between 85 to 90 percent of the employment in Washington). Based on the Employment Security Department files, the median wage for JTPA Title II-A participants the third quarter after they left the program was \$7.69 per hour. This was an \$.11 increase from 1993–94, controlling for inflation.

FIGURE 35

### *Employment and Earnings<sup>37</sup> of JTPA Title II-A Participants in the Third Quarter After Leaving Program*

	All
Percent Self-Reporting Employment When Surveyed	74%
Percent Self-Reporting Employment During the Third Quarter After Leaving Program	81%
Percent with Employment Reported by Employers to the Employment Security Department the Third Quarter after Leaving Program	61%
Median Quarterly Hours Worked, of Those Working	397
Mean Quarterly Hours Worked, of Those Working	354
Percent Employed Full-Time of Those Working (averaging 30 or more hours/week)	51%
Median Quarterly Earnings of Those Working	\$2,939
Size of Household Which Median Earnings Would Support at Poverty Level <sup>38</sup>	2.4
Size of Household Which Median Earnings Would Support at Twice Poverty Level	1.2
Median Hourly Wage of Those Working	\$7.69

<sup>37</sup> All wages and earnings are stated in first quarter 1997 dollars.

<sup>38</sup> The federal poverty guidelines as identified by the Department of Health and Human Services.

The third quarter after they left the JTPA Title II-A program, the typical (median) participant had sufficient earnings to support a household of 2.4 persons above the poverty level. Using a higher income standard, the typical participant earned enough to support 1.2 persons at a “family wage” of twice the poverty level.

In order to examine the wage distribution of former students we divided Washington workers into quintiles based on their hourly wage. The percent of participants who had hourly wages in the third quarter postprogram in each quintile is shown below.<sup>39</sup>

The lowest 20% of  
Washington workers ..... 32%

The second 20% of  
Washington workers ..... 40%

The middle 20% of  
Washington workers ..... 20%

The fourth 20% of  
Washington workers ..... 7%

The highest 20% of  
Washington workers ..... 1%

According to the survey responses, 51 percent of those employed had health benefits provided by their employer, a 19 percentage point increase over the 1993–94 survey response, and 23 percent received pension benefits, a 7 percent increase from 1993–94. Seven percent reported employment covered by a union.

Earnings varied somewhat by gender and race-ethnicity. More men than women reported that they were employed at the time of the survey (84 to 70 percent, respectively). However, based on the Employment Security Department records, their rates of covered employment were nearly identical. Among those who were employed, women earned about \$0.27 less per hour than their male counterparts, and worked slightly fewer hours (22 per quarter). As a result, women’s median earnings were about 10 percent lower than men’s. There is very little difference among ethnic groups in employment outcomes, except that Native Americans had an employment rate that was about 85 percent of that for the rest of the population.

## Areas for Improvement

JTPA Title II-A serves disadvantaged adults, and on the average, enrollment lasts about six months. The relatively low earnings of former participants nine months after they left the program should be understood in this context. Most participants were very satisfied with the services they received.

<sup>39</sup> The lowest quintile ranges from \$4.90 to \$6.71, the second quintile is \$6.72 to \$9.38, the third quintile is \$9.39 to \$13.43, the fourth quintile is from \$13.44 to \$20.62, and the top quintile starts at \$20.63. These values are inflation adjusted from 1995 Unemployment Indicator wage records.

The last evaluation, based on 1993–94 participants, found that many participants were satisfied with the program, but many did not receive certain kinds of training or support services. In each skill area, about half the participants reported they did not receive training. A sizable minority of participants reported they left the program with their need for support services unmet. The evaluation also found a need to improve participant earnings. Most did not have sufficient earnings to achieve financial independence. Hourly wage levels were particularly low for women.

In comparison, based on the recent survey responses, more of the 1995–96 participants received training in each skill area assessed, including a substantial jump in participants reporting job-specific skills training. Fewer participants left the program with unmet needs for support services, and post-program employment and earnings were somewhat higher. There are, however, still some areas where more services appear to be needed.

Given the low educational attainment of participants prior to entering the program, it appears likely that higher percentages of participants should receive basic skills instruction in reading, writing, and math. As noted in prior evaluations, basic skills instruction should be integrated with work and job skills training. The program should continue to increase the percentage of participants receiving computer and general workplace skills training.

Twenty-one percent of the participants said they left the program with their need for information about job openings unmet, and 15 percent indicated their need for financial assistance was unmet. Only about half of those needing information about other government services indicated their need was met.

There remains a need to improve the postprogram earnings of participants, particularly for women. While labor market outcomes reflect the disadvantaged status of participants when they entered the program and the available job market, the program still should do more to target occupations and industries that pay a higher wage and more frequently provide full-time work.

# Secondary Vocational-Technical Education

Secondary vocational-technical education serves high school age youth in 236 school districts and 8 regional vocational skills centers throughout the state. Students are trained in agriculture, family and consumer sciences, trade and industry, marketing, business, diversified occupations, community resources, technology, cosmetology, and health occupations. Vocational guidance and counseling supports the offerings in most districts. Approximately 85 percent of high school students take at least one vocational education class, and nearly one-sixth of graduating seniors complete a vocational education sequence. All students are required to complete one credit of vocational education in order to graduate.

We limited our evaluation of this program to the segment of students who are identified by their districts as vocational education completers (districts define a high school vocational completer as someone who completed a vocational sequence, whether or not the student earns a diploma). This strategy is different than the other program evaluations included in the study, which were not limited to completers only.<sup>40</sup>

The Office of the Superintendent of Public Instruction does not maintain central unit records on K–12 students.

Therefore, it was necessary to ask individual school districts to volunteer records of those students who had completed a vocational education sequence. As a consequence, the study was unable to obtain a random sample of secondary vocational-technical students. Also, the sample of participating districts and vocational skills centers is not the same as the earlier study of 1993–94 completers. The results reported here represent vocational completer data from 53 school districts and 6 skills centers. These districts and skills centers include approximately one-third of all the graduating seniors in the state. The districts include a variety of urban, suburban, and rural areas around the state. Although this is a large and varied sample, the participating schools do not constitute a statistically representative sample of all schools in Washington State, and therefore the results are applicable only to the sample of participating schools.

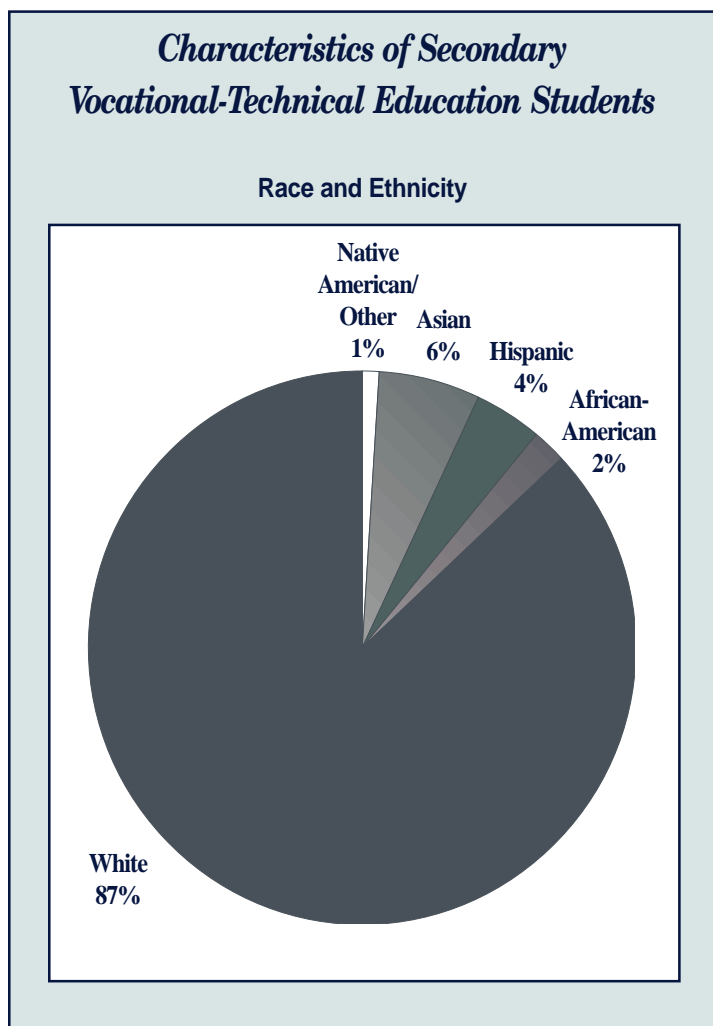
<sup>40</sup> Secondary vocational education counts any student who takes a single vocational education course as a vocational participant. This definition does not identify a group of participants that is separate from all other students. Because student records are not maintained in a standard manner across school districts, there are differences in how districts define vocational completer and in what type of data they maintain.

For the study, we obtained information on 4,775 students who completed secondary vocational-technical education during the 1995–96 school year. Demographic and course data were obtained from student records in various school districts, and employment-related information was secured from a match with the Employment Security Department records. In addition, 208 former students completed a telephone survey during the fall of 1997.

## Participant Characteristics

The students included in the study reflect roughly the racial-ethnic and gender makeup of the state's public schools, though white students are overrepresented in the high school vocational programs we studied. Eighty-seven percent of the students in the study were white, compared to 79 percent of public school students. Fifty-two percent of the students studied were female. (See Figure 36.)

FIGURE 36



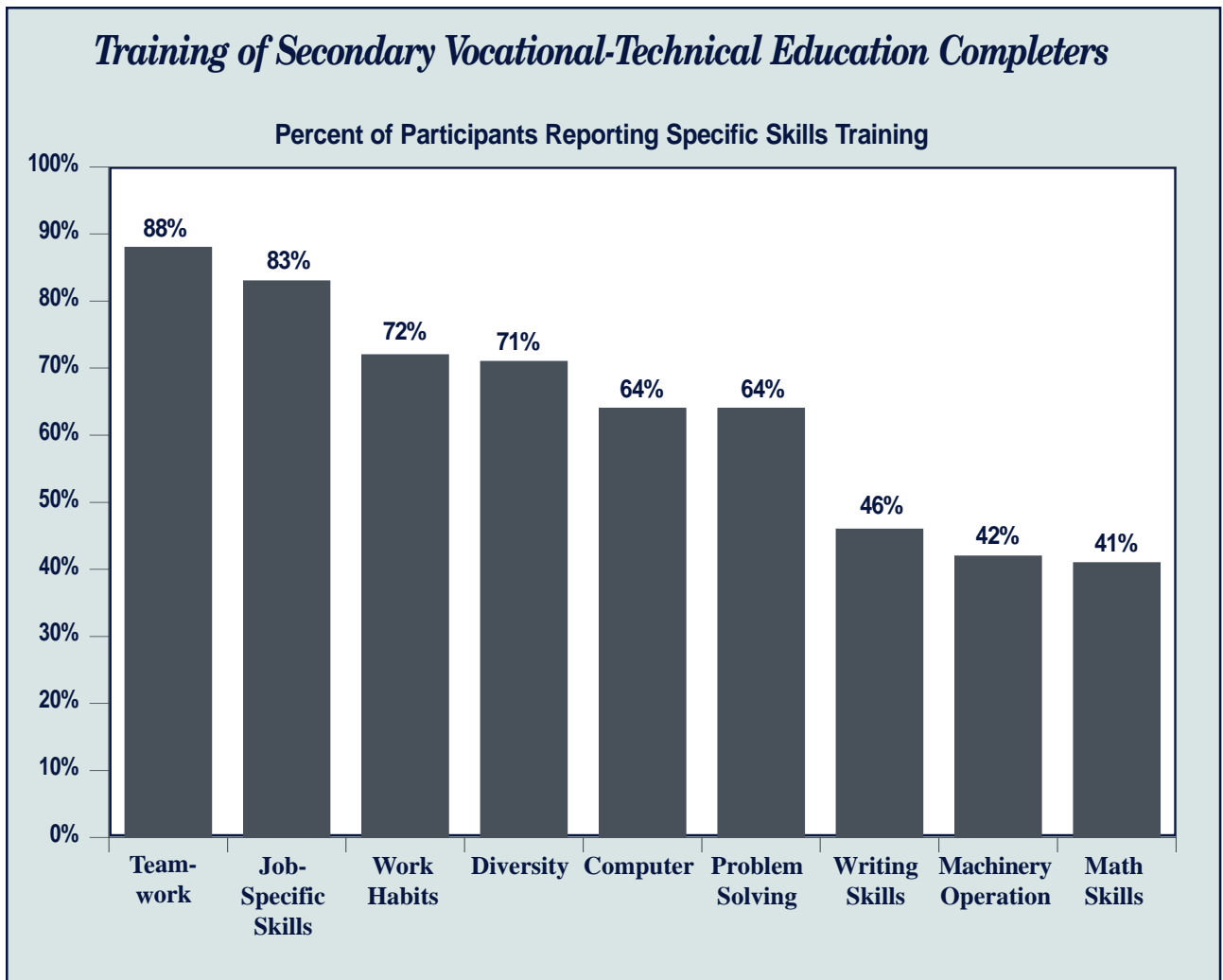
## Competency Gains

According to the survey, 96 percent of the students enrolled in secondary vocational-technical education for personal enjoyment, and 85 percent enrolled to make school more interesting. Sixty-seven percent of the students also said they enrolled in vocational programs to get skills for a new job and to prepare for postsecondary education. Sixty-four percent cited increasing confidence in basic skills as a reason for enrolling. In general, students of color were more likely than white students to cite improving their skills for a current job as a reason they enrolled in the program (31 to 12 percent, respectively).

Between 64 and 88 percent of the students reported they received training in teamwork (88 percent), specific job skills (83 percent), work habits (72 percent), diversity (71 percent), and problem solving (64 percent) as part of their vocational classes. Sixty-four percent reported that they received computer training as part of their vocational sequence. Between 41 and 46 percent reported receiving instruction in math

(41 percent), writing (46 percent), or in using specific equipment and machinery (42 percent). (See Figure 37.) Our results indicate that boys were much more likely to receive training in the operation of machinery than girls. While 60 percent of the male students we studied reported receiving training in this area, only 26 percent of the female students reported receiving similar training.

FIGURE 37



In most cases, students believed the vocational training they received improved their skills. (See Figure 38.) Of those students who received training, 95 percent or greater said their skills in specific job skills, operation of equipment and machinery, problem solving, work habits, diversity, teamwork, writing and math skills improved. Of these, students reported the highest increase in their skills in operation of equipment and machinery (69 percent reported their skills had improved a lot), and in specific job skills (60 percent reported their skills improved a lot). Fewer students said their math and writing skills had improved a lot (only 35 and 29 percent, respectively, reported such a change). Thirty-two percent of those who received training in computer basics said that these skills improved a lot.

Among students who were employed when surveyed, 70 percent said their high school vocational training was related to their job. When asked if there were any skills they would still like to improve, 40 percent of all former participants, not just the employed, said no. Of those who recognized a need for additional training, 85 percent said they wanted more computer training, and 79 percent noted a need for leadership training.

Many of the former students continued their education at a community or technical college or four-year university. In the third quarter after completing their program, 25 percent of the former students were enrolled at a community or technical college, and 13 percent were enrolled in a 4-year institution.

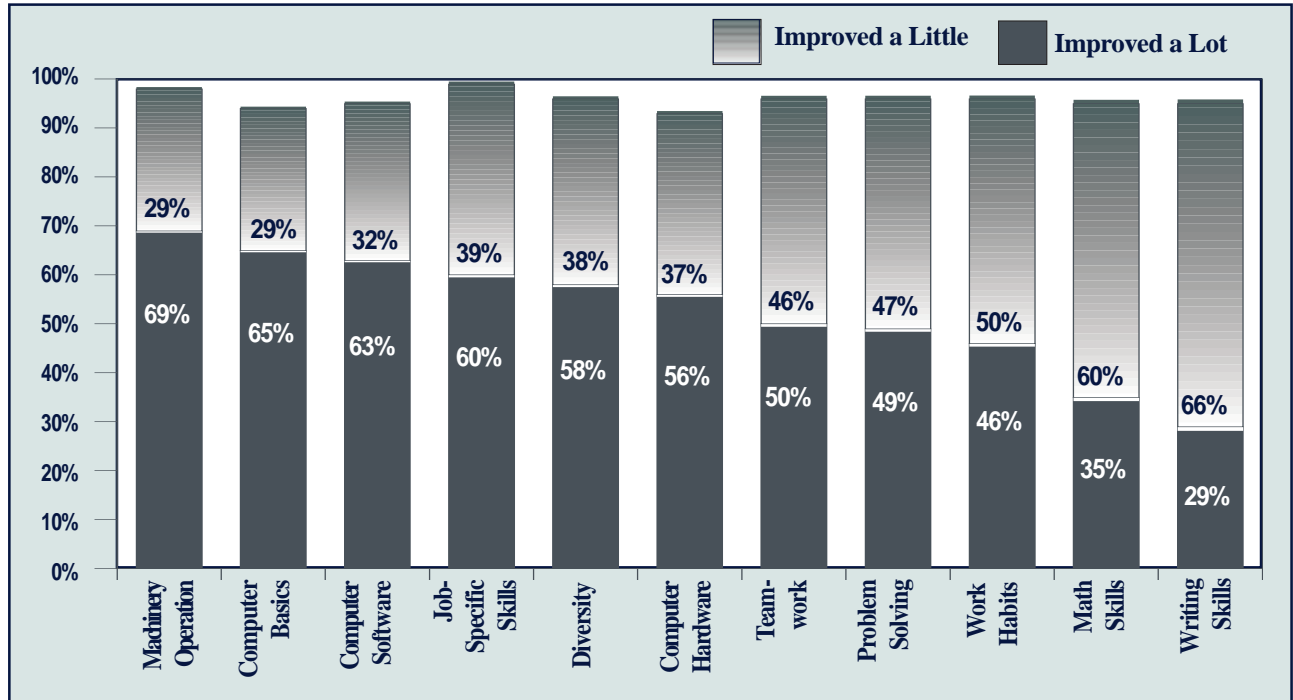
## Participant Satisfaction

According to the survey, former students were generally satisfied with their high school vocational program. Fifty percent said the program definitely met their objectives, while only 3 percent said their objectives were not met at all. Fifty-eight percent of former students reported they were very satisfied with the program. An additional 37 percent were somewhat satisfied with the overall quality of the program, and only 5 percent reported being dissatisfied overall. No more than 15 percent of the former students were dissatisfied with any single aspect of their instruction.

In general, former high school vocational students reported needing fewer support services than other groups we studied, and when they did need these services, they generally received them. In no case did more than 13 percent of students complete their program with an unmet need for a support service. (See Figure 39.) The service most frequently needed by students was assistance with resume writing and job interviewing (each needed by about 45 percent). Of those needing help with resume writing and interviewing skills, at least 87 percent of the students said they received it, and 94 percent or over of those said the service met their needs. In general, female students were more likely than male students to report needing assistance with resume writing. Fifty-five percent of female students said they needed resume writing assistance; only 39 percent of male students reported needing help in this area.

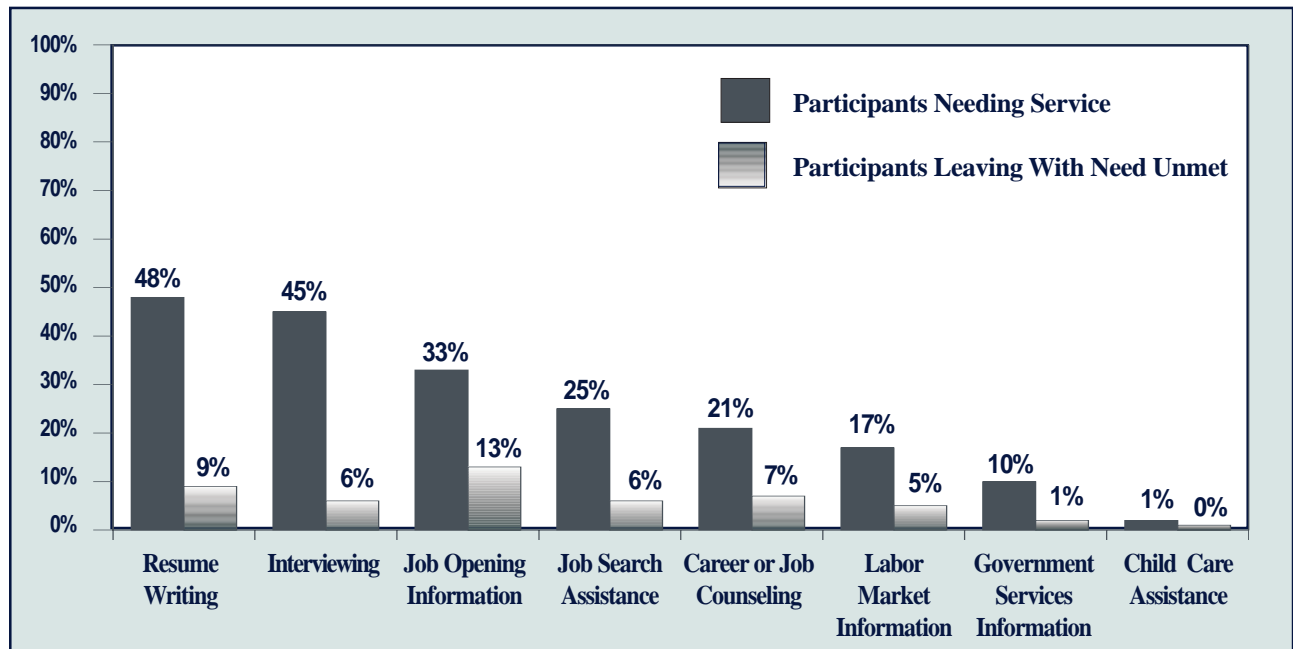
*Percentage of Secondary Vocational-Technical Education Completers Receiving Specific Skills Training Who Reported Their Skills Improved a Little or a Lot*

FIGURE 38



*Support Service Needs of Secondary Vocational-Technical Education Students*

FIGURE 39



Thirty-three percent of the former students reported needing information about job openings, and 25 percent said they needed job search assistance. Of those students reporting needing assistance in these areas, 75 percent reported receiving information about job openings, and 77 percent said they received job search assistance. Eighty percent of students receiving information about job openings said their needs had been met, while 98 percent of those students who received job search assistance said the service met their needs. The area in which the greatest percentage of students reported needing and receiving a service, but having it not meet their needs, was information about job openings, where 13 percent left with their need unmet. When asked about their satisfaction with assistance in program selection (not shown in the figure), 52 percent were only somewhat satisfied. In general, students reported needing fewer support services than in the earlier study of 1993–94 completers, possibly due to the improved economy and market for workers.

## Employer Satisfaction

The employer survey asked firms to evaluate new employees who recently completed a high school vocational program. Eighty-seven percent of employers said they were either somewhat or very satisfied with these workers' overall productivity. Fifty-eight percent stated they were satisfied with the overall quality of work of these new employees.<sup>41</sup> (See Figure 40.)

Employers rated new workers' skills high in several areas. Most often they rated high new workers' reading skills (88 percent satisfied), writing skills (83 percent), and math (83 percent). Employers reported relatively less satisfaction with new workers' problem solving skills (52 percent), computer skills (67 percent), communication skills (68 percent) ability to accept supervision (72 percent), job-specific skills (72 percent), and teamwork (72 percent satisfied).

These results roughly reflect the areas of employer satisfaction and dissatisfaction as the in 1995 survey, though variations exist. Compared to the results from the earlier employer survey, more employers were satisfied with these workers' basic and job-specific skills.

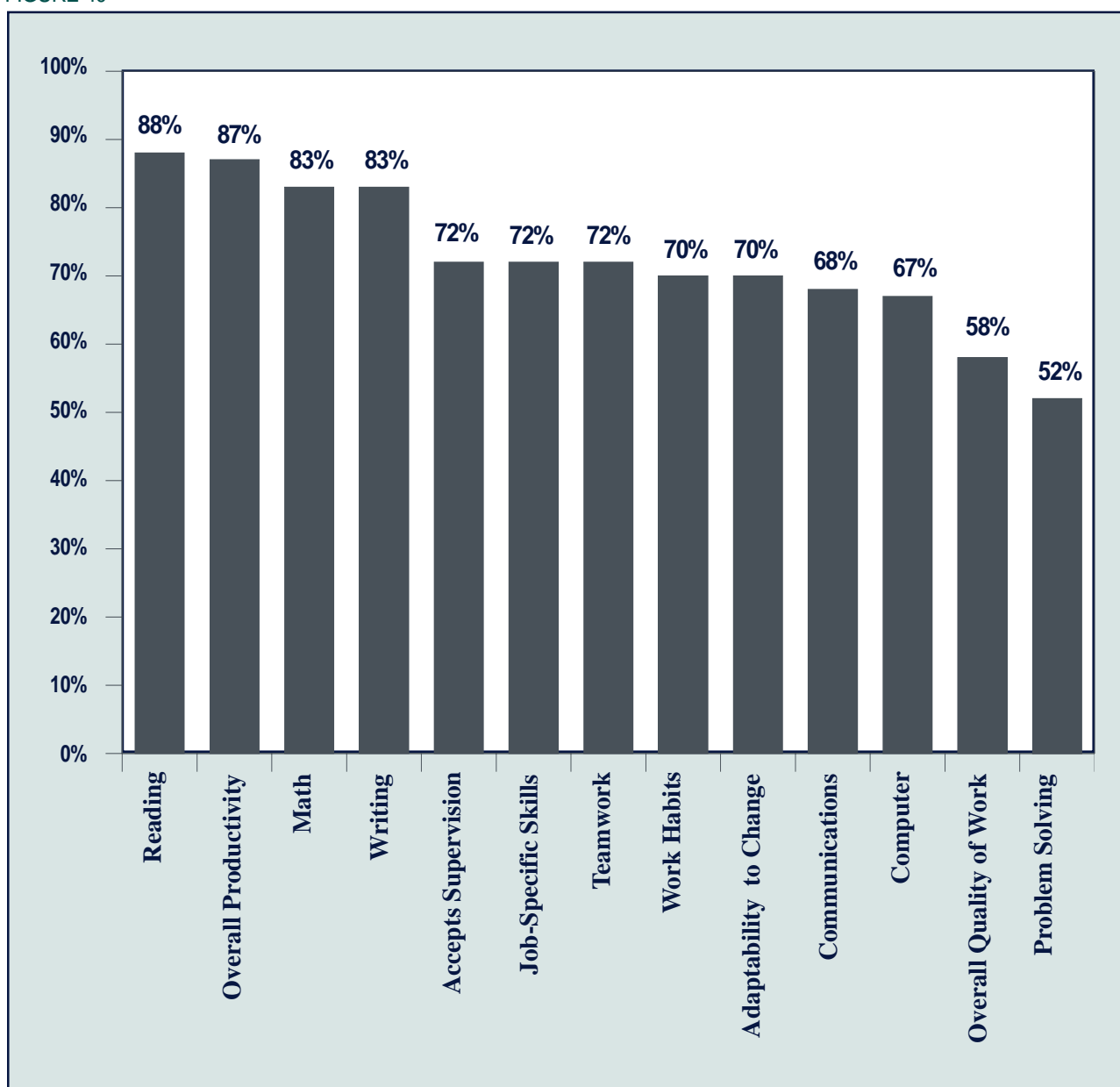
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<sup>41</sup> This response for employer satisfaction is a decline from the 1995 survey results. In 1995, 87 percent of employers said they were satisfied with the overall quality of work of such employees. The recent survey, however, used a different response scale (very satisfied, somewhat satisfied, somewhat dissatisfied, very dissatisfied; compared to very satisfied, somewhat satisfied, not very satisfied). This change may be the reason for the decline rather than any real difference in employer opinion.

*Employer Satisfaction of Firms That Hired  
Workers Who Had Recently Completed a High School or  
Skills Center Vocational Education Program*

Percent Who Were Very or Somewhat  
Satisfied With Certain Skills of Those Workers

FIGURE 40



## Employment and Earnings

According to the survey, 80 percent of the 1995–96 secondary vocational completers were employed during the period 6 to 9 months after leaving school. Based on Employment Security Department wage records, we found that 68 percent of the secondary vocational education participants had reported employment during the third quarter after they left their program (the Employment Security

Department wage file includes 85 to 90 percent of the employment in Washington and does not include out-of-state employment). The median wage for former high school vocational completers was \$6.51 per hour. Though this wage may seem low, it is important to remember that these are young, entry-level workers. Differences between these results and those for 1993–94 completers, shown in Figure 41, could easily be a result of changes in schools that were included in the studies.

FIGURE 41

<i>Employment and Earnings<sup>42</sup> of Secondary Vocational-Technical Students in the Third Quarter After Leaving Program</i>		
School Year	1993–94 COMPLETERS	1995–96 COMPLETERS
Percent Self-Reporting Employment When Surveyed	77%	74%
Percent Self-Reporting Employment During the Third Quarter After Leaving Program	n/a	80%
Percent with Employment Reported by Employers to the Employment Security Department the Third Quarter after Leaving Program	64%	68%
Median Quarterly Hours Worked, of Those Working	n/a	289
Mean Quarterly Hours Worked, of Those Working	264	284
Percent Employed Full-Time of Those Working (averaging 30 or more hours/week)	n/a	33%
Median Quarterly Earnings of Those Working	\$1,679	\$1,818
Size of Household Which Median Earnings Would Support at Poverty Level <sup>43</sup>	n/a	0.92
Size of Household Which Median Earnings Would Support at Twice Poverty Level	n/a	0.46
Median Hourly Wage of Those Working	\$6.31	\$6.51

<sup>42</sup> All wages and earnings are stated in first quarter 1997 dollars.

<sup>43</sup> The federal poverty guidelines as identified by the Department of Health and Human Services.

In all, 77 percent were either employed in employment reported to Employment Security or enrolled in a two- or four-year college during the third quarter following their program. Nearly two-thirds of those enrolled in college also had covered employment in that quarter. Extending our analysis to the entire year after students left their program, 95 percent of the former students were found to have some reported employment during the year or were enrolled in a 2- or 4-year college.<sup>44</sup>

The third quarter after they left their high school vocational program, the typical (median) student had sufficient earnings to support a household of 0.92 persons above the poverty level. The typical former student earned enough to support 0.46 person at a “family wage” of twice the poverty level. According to the survey responses, 34 percent of those employed had health benefits provided by their employer, and 17 percent received pension benefits. Only 3 percent reported receiving Aid to Families With Dependent Children or Food Stamps in the last 12 months.

Wages and earnings varied by race-ethnicity and gender. African-American and Native American students had the highest earnings, hours, and wage rates during the third quarter after leaving the program. Asian/Pacific Islander students had the lowest quarterly earnings, not because they received the lowest hourly wages, but because they worked far fewer hours than other groups. As is true in most other programs we studied, male students had higher quarterly earnings

than female students: they worked more hours and received higher hourly wages than their female counterparts. However, this finding is more striking than for other programs because the disparity is not affected by gender differences in earnings prior to enrolling in the program.

In order to examine the wage distribution of former students, we divided Washington workers into quintiles based on their hourly wage. The percent of participants who had hourly wages in the third quarter postprogram in each quintile is shown below.<sup>45</sup>

The lowest 20% of Washington workers .....	55%
The second 20% of Washington workers .....	35%
The middle 20% of Washington workers .....	7%
The fourth 20% of Washington workers .....	2%
The highest 20% of Washington workers .....	1%

<sup>44</sup> All Washington public college and several private college enrollments were analyzed, as well as some colleges in other states.

<sup>45</sup> The lowest quintile ranges from \$4.90 to \$6.71, the second quintile is \$6.72 to \$9.38, the third quintile is \$9.39 to \$13.43, the fourth quintile is from \$13.44 to \$20.62, and the top quintile starts at \$20.63. These values are inflation adjusted from 1995 Unemployment Indicator wage records.

## Areas for Improvement

The majority of students were satisfied with the overall quality of their secondary vocational education program. Most found employment in jobs related to their training. While the evaluation results were generally positive, there are certain areas that could be stronger.

Although more districts and skills centers volunteered to participate in this year's pilot program of student follow-ups, this is no substitute for an ongoing evaluation program at the Office of the Superintendent of Public Instruction in order to learn postschool results and to maintain student data in a consistent manner.

According to both the participant and employer surveys, skill areas that should be targeted for improvement are computer skills and problem solving. Fewer than 70 percent of employers were satisfied with these skills among new employees who had recently completed secondary vocational education, and fewer than 70 percent of students reported receiving training in these areas. Communication skills and good work habits should also continue to be targeted by secondary vocational education. Seventy percent of employers were satisfied with the work habits of these employees, and 72 percent of the students reported that they were trained in good work habits. Fewer than 70 percent of employers were satisfied with these workers' communication skills.

These findings are generally the same as the last outcome evaluation based on the 1993-94 completers. There was one major

change in the skills areas that stands out. The last employer survey found relatively low satisfaction with basic skills among employees who had recently completed secondary vocational education. The current survey found more than 80 percent of employers were satisfied with these employees' reading, writing, and math skills, although satisfaction with communication skills remains low compared to other skills areas.

Based on the student surveys, satisfaction appears generally to be good with support services. The majority of students who needed a support service received the service and had their needs met. Students could use more assistance with program selection. The majority were somewhat satisfied with assistance in selecting their program. There could also be improvement in providing information about job openings. Among those students who said they needed information about job openings, about 40 percent did not have their needs met. The previous outcome evaluation had found some relative weakness in career counseling and job placement assistance.

As was found in the previous evaluation, the postprogram wages and earnings of female students were lower than those of males. Secondary vocational education should continue to strive to eradicate differences based on gender. Unlike the previous evaluation, this year's results show that African-American students had higher postprogram wages and earnings than did white students.

# Job Training Partnership Act Title II-C for Youth

The Job Training Partnership Act Title II-C serves low-income youth from 16 to 21 years old with barriers to success in school or employment. Barriers include low levels of literacy, dropping out of school, a criminal record, and receipt of Aid to Families With Dependent Children. When considering participant outcomes of Title II-C, it is important to remember the program targets low-income youth specifically, and participants do not have ready access to many resources and opportunities. Funding for this program has also been substantially reduced in the last two years.

JTPA Title II-C provides a variety of training and employment-related services, including, but not limited to, occupational training, basic skills instruction, work experience, and job search assistance, such as career counseling, resume preparation, and job referrals. Basic skills instruction includes reading, writing, speaking, math, and reasoning, with the goal to demonstrate the ability to apply these skills. Lacking these skills is a condition of eligibility for all in-school and most out-of-school youth. Participation in Title II-C is closely linked to educational goals, remaining in or returning to school, and obtaining basic educational skills.

Title II-C is administered by the Employment Security Department at the state level and by 12 Service Delivery Areas (SDAs)

at the local level. Each SDA is headed by a Private Industry Council who either provides services directly or purchases services from other providers in partnership with local elected officials. SDAs develop a local education plan in cooperation with local school districts, which establish educational standards for individual progress. SDAs then monitor the participants' progress and can supplement traditional services by providing tutoring, mentoring, or other appropriate activities.

Significant numbers of individuals enter and leave the JTPA Title II-C program without receiving any employment-related service beyond an employability assessment. This report excludes such individuals.<sup>46</sup> Individuals whose participation was limited to assessment services constituted 14 percent of the JTPA Title II-C enrollees who exited during the program year. In general, the program has declined in size by about 30 percent over the last 2 years. This may result in some change in the composition of the population served; for example, if the program became more narrowly targeted in terms of serving youth of highest risk or need.

<sup>46</sup> Such individuals were included in our previous evaluation of 1993–94 participants. All comparisons with the 1993–94 participants that are reported here were made including all individuals enrolled in the 1995–96 program in order to maintain comparability.

For the study, participant records were obtained on 1,310 youth who left JTPA Title II-C during the 1995 program year (July 1, 1995, to June 30, 1996). In addition, 337 former participants responded to the survey conducted during the fall of 1997. On average, participants were in the program for about five months.

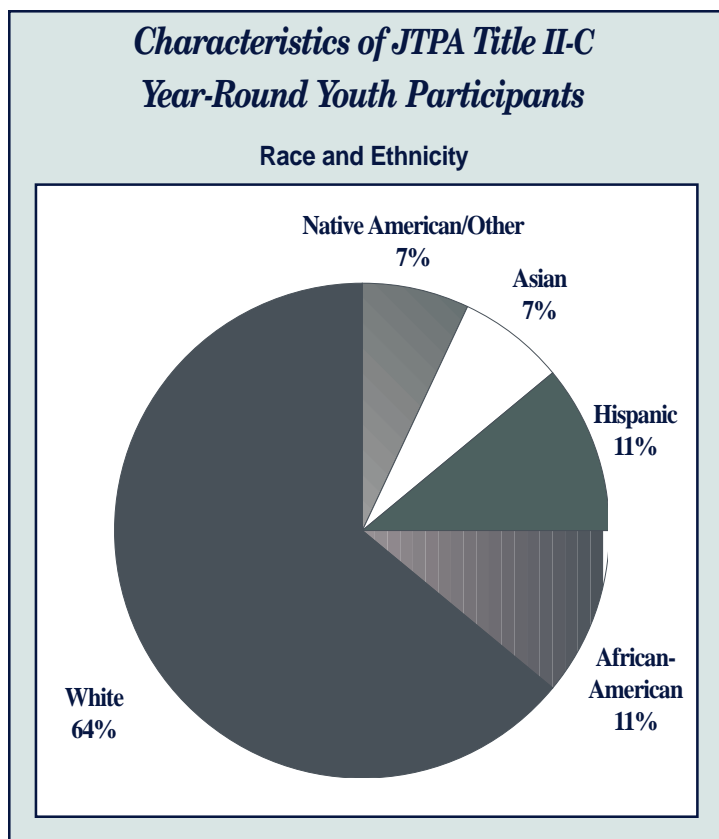
### Participant Characteristics

Title II-C participants were more racially-ethnically diverse, less educated, poorer, and, obviously, younger than the state general population. Most were under age 20, with less than one-quarter of the total participants in the 20–21 age group. African-American, Hispanic, and Native American

youth were all represented in the program at levels above their state populations (Asian/Pacific Islander youth participate at levels similar to their state population). Native American participation was particularly high at 3.5 times the proportion of Native American youth in Washington. Hispanic youth participation declined from 1993–94. Female youth made up more than half of the total Title II-C population, with females outnumbering males by about 14 percentage points. (See Figure 42.)

Given their age, Title II-C participants had little history of prior employment. Only 28 percent had reported employment in the third quarter prior to enrollment. Those employed had average (median) quarterly earnings of \$778, reflecting both low-wage rates (\$5.66/hour, median) and part-time employment (124 hours, median).

FIGURE 42



### Competency Gains

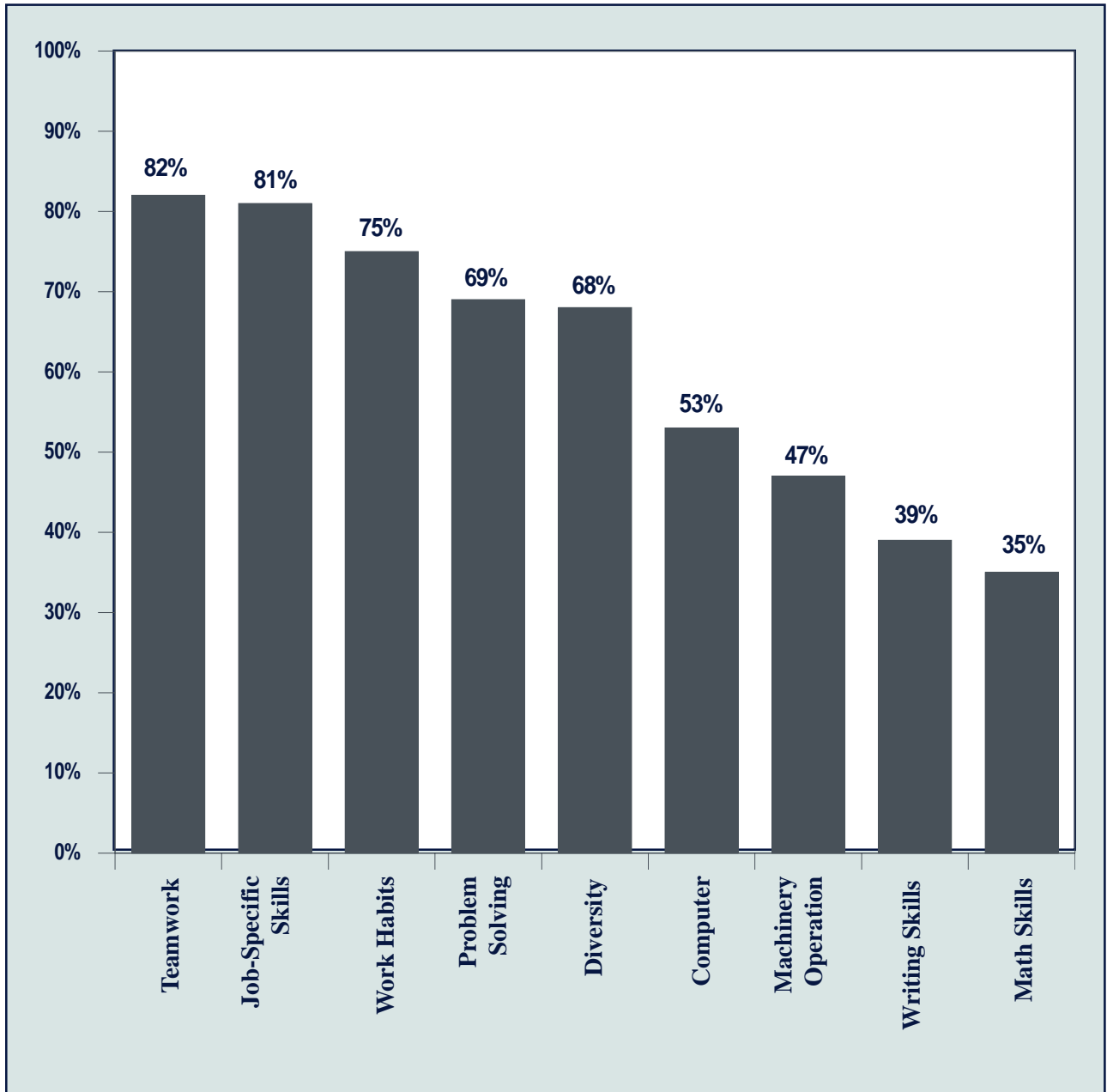
Based on survey results, the majority of JTPA Title II-C participants enrolled to improve their job skills, to get help in finding a job, to get hands-on job training or to get a GED. Seventy-seven percent stated they enrolled to get skills for a new job, 86 percent to obtain job search assistance, 75 percent to get on-the-job-training, and 75 percent to obtain a GED.

When surveyed, 81 percent reported they received training in specific job skills as part of their program. Participants also said they received training in teamwork (82 percent), work habits (75 percent), and problem solving (69 percent). Of those who received such training, 98 percent or more said their skills improved in these areas. (See Figure 43.) Participants

## *Training of JTPA Title II-C Year-Round Youth Participants*

### Percent of Participants Reporting Specific Skills Training

FIGURE 43



reported that their skills improved a lot in job-specific skills (62 percent), teamwork (67 percent), work habits (65 percent), and problem solving (49 percent). Fifty-three percent also reported receiving computer training as part of their program. Of those who received training in computer basics, 65 percent said their skills improved a lot. (See Figure 44.) Overall, female participants were much more likely than male participants to receive computer training.

A majority of participants reported they did not receive instruction in basic skills. Only 39 percent said they received instruction to improve their writing, and only 35 percent said they received math instruction.

More participants reported receiving computer and job-specific skills training in 1995–96 than in 1993–94. The percentage who reported receiving computer training rose from 41 percent in 1993–94 to 53 percent in 1995–96. Participants also reported an increase in job-specific skills training between the two years, whereas 59 percent reported receiving job-specific skills training in 1993–94, and 81 percent reported receiving this training in 1995–96.

Among those employed after the program, 71 percent said their training was related to their job (35 percent stated their training was very related to their job).

During the third quarter after leaving the program, 10 percent were continuing their education in a community or technical college.

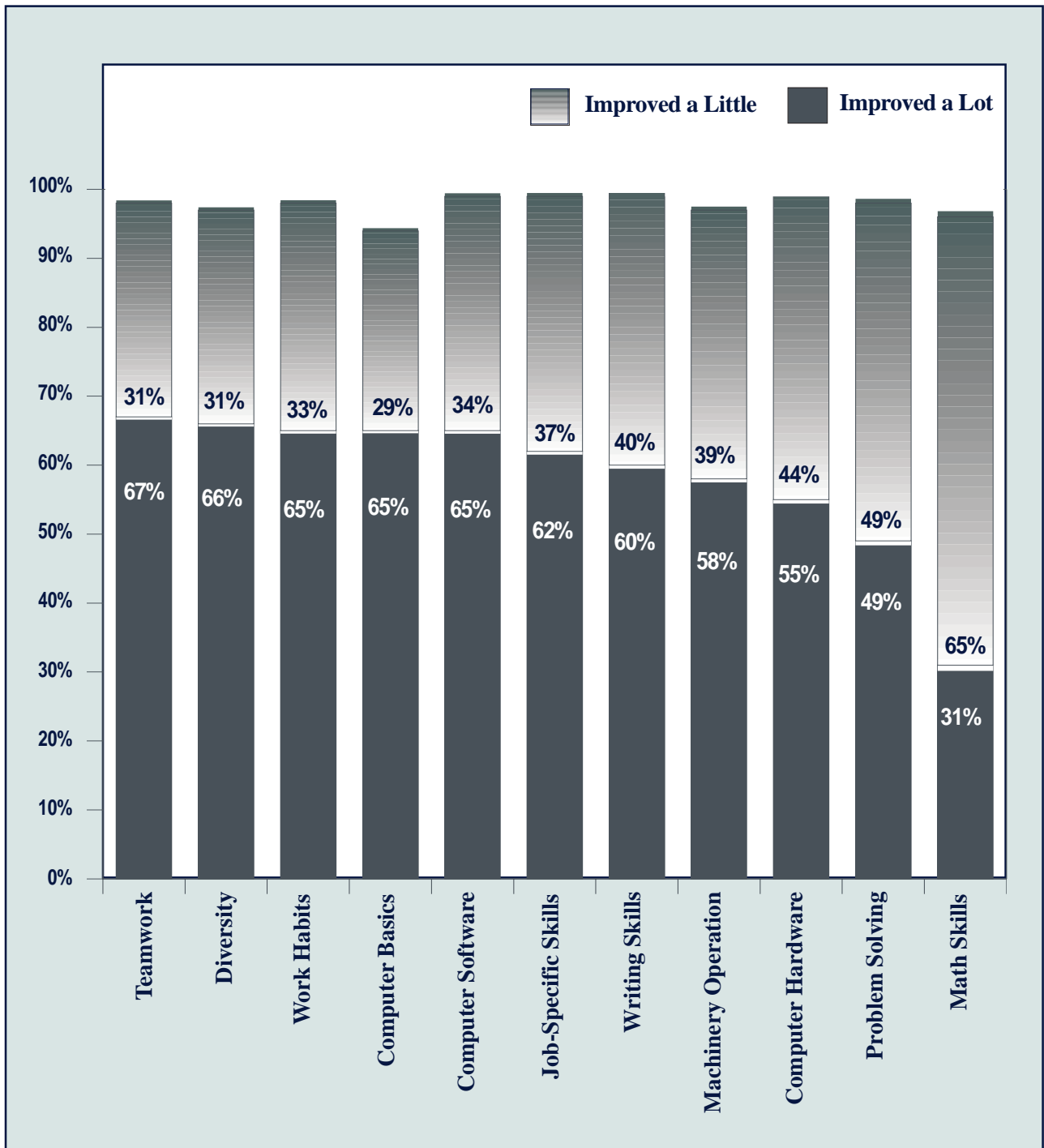
When asked by the survey if there were any skills they would still like to improve, approximately one-third of participants said no. Of those who recognized a need for additional training, over 80 percent said they wanted more computer training, and approximately three-quarters noted a need for leadership training.

## Participant Satisfaction

Survey results reveal that participants were quite satisfied with the training and support services they received as part of their JTPA Title II-C program. Overall, 95 percent of the participants surveyed said they had met their educational objectives in the program (53 percent stated they definitely met their objectives). Only 5 percent said the program did not meet their educational objectives at all. Fifty-nine percent said they were very satisfied with the overall quality of the program. An additional 36 percent said they were somewhat satisfied with the program, and only 5 percent said they were either somewhat or very dissatisfied with the program as a whole. Ninety-one percent said they were satisfied with the quality of teaching (68 percent of these said they were very satisfied), and only 9 percent were dissatisfied. Participants also reported being very satisfied with program facilities and buildings (65 percent), the usefulness of the program to their career (60 percent), and the amount of interaction with teachers (59 percent). The area in which participants reported the least satisfaction was with the length of the program—13 percent reported being dissatisfied, 78 percent of whom said they thought the program was too short.

*Percentage of JTPA Title II-C Participants  
Receiving Specific Skills Training Who Reported  
Their Skills Improved a Little or a Lot*

FIGURE 44



As stated earlier, many of the services provided by JTPA Title II-C are not occupational or basic skills training, but employment-related services, such as job search assistance. Based on the survey results, most of the participants who needed employment and other support services received them, and in most cases they said their needs had been met by the services.

The services most frequently needed by participants were assistance with resume writing (needed by 61 percent of the participants), information on job openings (61 percent), interviewing (57 percent), and job search assistance (52 percent). In each case, over three-quarters of the participants needing the service reported receiving it, and over 90 percent who received the service were satisfied that it met their need. The support service for which the largest percentage of participants left the program with their need unmet (14 percent) was information about job openings. (See Figure 45.) In general, female participants were much more likely than their male counterparts to report needing child care assistance.

## Employer Satisfaction

It was not feasible to ask employers about each of the four JTPA programs included in the study (JTPA Titles II-A, II-B, II-C, and III) separately. Employers were instead asked about workers who had been trained “by JTPA.” This section presents findings on employer

satisfaction with new employees who completed any type of JTPA program. In addition, relatively few employers felt that they were in a position to evaluate new employees who had recently completed a JTPA program. For these reasons, the findings on employer satisfaction should be treated with caution.

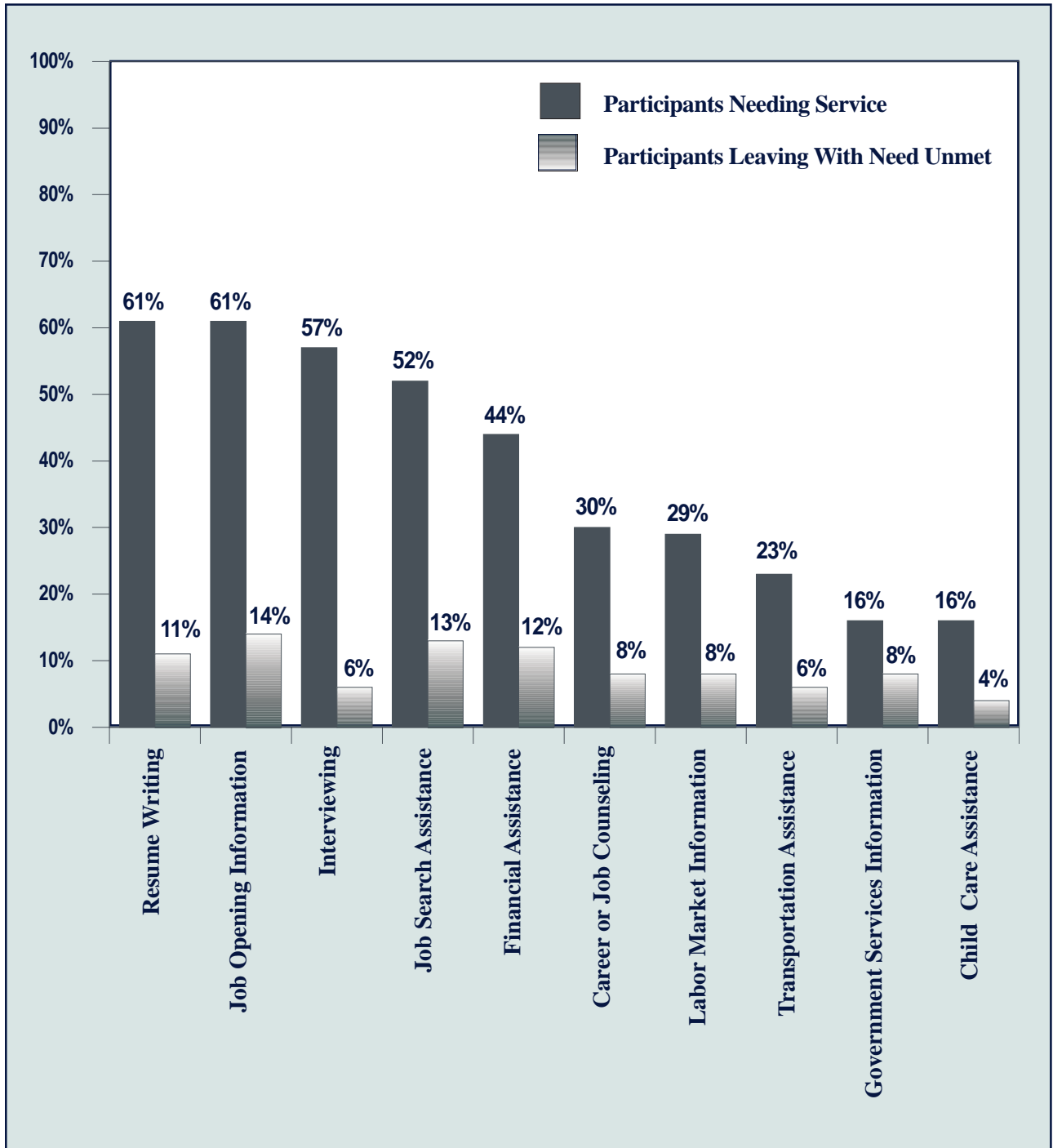
Seventy percent of employers said they were either somewhat or very satisfied with these workers’ overall productivity. Sixty-six percent stated they were satisfied with the overall quality of work of these new employees.<sup>47</sup> For further elaboration of employers’ reactions, please see the employer survey results for JTPA Title III for Dislocated Workers.

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<sup>47</sup> This response for employer satisfaction is a decline from the 1995 survey results. In 1995, 87 percent of employers said they were satisfied with the overall quality of work of such employees. The recent survey, however used a different response scale (very satisfied, somewhat satisfied, somewhat dissatisfied, very dissatisfied; compared to very satisfied, somewhat dissatisfied, not very satisfied). This change may be the reason for the decline rather than any real difference in employer opinion.

## *Support Service Needs of JTPA Title II-C Year-Round Youth Participants*

FIGURE 45



## Employment and Earnings

According to the survey responses, 66 percent of the 1995–96 JTPA Title II-C participants were employed during the period six to nine months following the program. (See Figure 46.) Based on employment reported to the

Employment Security Department, the majority of those employed worked for firms in the retail trade, service, and government sectors of the economy. Eight percent were employed by firms in manufacturing, 7 percent in business services firms, and 6 percent were in health care firms.

FIGURE 46

### *Employment and Earnings<sup>48</sup> of JTPA Title II-C Participants in the Third Quarter After Leaving Program*

Percent Self-Reporting Employment When Surveyed	66%
Percent Self-Reporting Employment During the Third Quarter After Leaving Program	66%
Percent with Employment Reported by Employers to the Employment Security Department the Third Quarter after Leaving Program	50%
Median Quarterly Hours Worked, of Those Working	258
Mean Quarterly Hours Worked, of Those Working	271
Percent Employed Full-Time of Those Working (averaging 30 or more hours/week)	32%
Median Quarterly Earnings of Those Working	\$1,478
Size of Household Which Median Earnings Would Support at Poverty Level <sup>49</sup>	.74
Size of Household Which Median Earnings Would Support at Twice Poverty Level	.37
Median Hourly Wage of Those Working	\$6.04

<sup>48</sup> All wages and earnings are stated in first quarter 1997 dollars.

<sup>49</sup> The federal poverty guidelines as identified by the Department of Health and Human Services.

Fifty percent of the JTPA Title II-C participants were found to have employment reported to the Employment Security Department during the third quarter after they left the program. (The Employment Security Department wage file includes 85 to 90 percent of the employment in Washington and does not include out-of-state employment).

Thirty-two percent worked an average of 30 hours or more per week during the third quarter. The median wage was \$6.04 per hour, with median quarterly earnings of \$1,478. Though these figures are low, it is important to remember that JTPA Title II-C participants are young, entry-level workers.

The third quarter after leaving the JTPA Title II-C program, the typical (median) participant did not have sufficient earnings to support a household of one person above the poverty level.

In order to examine the wage distribution of former students, we divided Washington workers into quintiles based on their hourly wage. The percent of participants who had hourly wages in the third quarter postprogram in each quintile is shown below.<sup>50</sup>

The lowest 20% of  
Washington workers ..... 65%

The second 20% of  
Washington workers ..... 23%

The middle 20% of  
Washington workers ..... 9%

The fourth 20% of  
Washington workers ..... 2%

The highest 20% of  
Washington workers ..... 1%

As in other programs, earnings varied by gender and race-ethnicity. In general, male participants were more likely than their female counterparts to have reported employment 9 months after the program (55 to 47 percent, respectively) and to receive higher hourly wages. Quarterly earnings were roughly similar for the two groups, however, due to the fact that female participants worked more hours during the quarter than male participants. African-American, Asian/Pacific Islander, and Native American participants had higher earnings during the quarter than their white or Hispanic counterparts, attributable to slightly higher hourly wages and more hours worked.

According to the survey responses, 36 percent of those employed had health benefits provided by their employer, and 20 percent received pension benefits. Nine percent of the participants reported employment covered by a union.

<sup>50</sup> The lowest quintile ranges from \$4.90 to \$6.71, the second quintile is \$6.72 to \$9.38, the third quintile is \$9.39 to \$13.43, the fourth quintile is from \$13.44 to \$20.62, and the top quintile starts at \$20.63. These values are inflation adjusted from 1995 Unemployment Indicator wage records.

## Areas for Improvement

JTPA Title II-C serves disadvantaged youth and provides services for only about five months on the average. As is typical of young entry-level workers, former participant wages and earnings were relatively low. Most participants, however, were very satisfied with the overall quality of their program.

The last outcomes evaluation (based on the 1993–94 participant survey) found a substantial percentage of participants could have used more instruction than the program provided, especially in basic skills. While the recent 1995–96 survey found more participants reported receiving job-specific and computer skills training, there was no increase in the percentage reportedly receiving basic skills instruction. Given that the majority of participants entered the program without a GED or high school diploma, it seems that more than 40 percent of the participants should report receiving basic skills instruction. As noted in prior evaluations, basic skills instruction is most effective when integrated with work and job skills training. Communication skills should also be improved.

Support services remain a strong area for JTPA Title II-C, although there could be some improvement in satisfying the need for information about job openings.

Employment rates and earnings were somewhat higher, and hourly wages were little changed since the last evaluation. The program should attempt to better target occupations and industries that pay higher wages. The program should also strive to eliminate the lower rates of employment and hourly wages for women.

# Job Training Partnership Act Title II-B Summer Youth Program

The Job Training Partnership Act Title II-B program serves economically disadvantaged youth from 14 to 21 years of age. JTPA Title II-B offers both classroom and work-based learning opportunities: employment for approximately eight weeks in the summer months and education remediation, which usually includes high school credit for course work accomplished. Sixty-seven percent of all JTPA Title II-B youth must be enrolled in educational activities. Youth may be enrolled in school-sponsored summer school or work with certified teachers who directly provide educational activities.

JTPA Title II-B is administered in the same manner as the other JTPA titles, with one important difference: the program is started and stopped each year because it operates only during the summer months. Because of severe cutbacks in funding the year-round program for youth, a number of participants transfer between JTPA Title II-C (year-round) and JTPA Title II-B (summer only) at the beginning and end of the summer. When considering the outcomes of these participants, it is important to remember that the program is designed to provide young people with a summer job and help them make up

education deficiencies so they can graduate on time, not to help them become immediately ready for full-time work.

The program is administered by the Employment Security Department at the state level and by 12 Service Delivery Areas at the local level. Each Service Delivery Area is headed by a Private Industry Council, that either provides services directly or purchases services from other providers, in partnership with local elected officials.

For the study, participant records were obtained on 5,325 individuals who participated in the JTPA Title II-B program during the summer of 1995. Individuals who transferred to the JTPA Title II-C year-round youth program at the end of the summer were excluded from this analysis and included in the section on JTPA Title II-C for Youth (year-round) program. Employment-related information was obtained through a match with the Employment Security Department files (representing 85 to 90 percent of in-state employment). In addition, 411 former participants from the summer of 1996 responded to a telephone survey conducted in December of 1996.

Because the goals of the program are substantially different from the other programs in this report, the types of information in this section differ from that presented in the other sections.

## Participant Characteristics

Participants in the JTPA Title II-B program were more likely to be young, poor, and persons of color than is the state general population. More than three-quarters of the participants were less than 18 years old. Roughly half of the participants were white, compared to the roughly three-quarters of public school students. Seventeen percent of program participants were African-American, 14 percent were Asian-American/Pacific Islander, 12 percent were Hispanic, and 6 percent were Native American. Fifty-one percent of the participants were female.

## Competency Gains

At least 50 percent of the JTPA Title II-B participants said they engaged in work experiences that were either coordinated or combined with classroom training. Twenty-nine percent of those surveyed said they were employed three to five months after they left the summer program. Of those, 63 percent said their summer job experience was related to that job. A full 80 percent of employed former participants said their summer program experience was useful in their job.

At the time of the survey, 79 percent of the participants were still working toward their high school diploma or GED, and an additional 9 percent said they were enrolled in a post-secondary program.

## Participant Satisfaction

The survey results indicate that the participants were mostly satisfied with their JTPA Title II-B program. Sixty-eight percent of the participants reported that they were very satisfied with the overall quality of the program; only 4 percent said they were dissatisfied with the program overall. Approximately 45 percent said that the summer program teachers were better than their regular school-year teachers, and the pace of the summer classroom activities was faster.

Fifty-nine percent of JTPA Title II-B participants said that the material they learned in the summer program was easier to use than the material covered in school-year classes. Of those looking for work, 52 percent said the summer program was very helpful to their job search, and of those who remained in school, 39 percent said the program was useful to their current school work.

## Employer Satisfaction

It was not feasible to ask employers about each of the four Job Training Partnership Act programs included in the study (JTPA Titles II-A, II-B, II-C, and III). Employers were instead asked about workers who had been trained “by JTPA.” Since few JTPA Title II-B former participants were employed soon after the program, employer satisfaction with JTPA Title II-B is not reported here.

## Employment and Earnings

The percentage of students who said they had jobs (29 percent) 3 to 5 months after leaving the program was very low. This is primarily due to the substantial percentage of participants who were still in high school when the survey was conducted. Twenty-seven percent of the participants were found to have employment reported to the Employment Security Department during the third quarter after they left the program (the Employment Security Department wage files include between 85 to 90 percent of the employment in Washington State and does not include out-of-state employment). Of these participants, 9 percent were working full-time (30 or more hours per week). The median wage for those working was \$5.60 per hour. (See Figure 47.)

### *Employment and Earnings<sup>51</sup> of JTPA Title II-B Participants in the Third Quarter After Leaving Program*

FIGURE 47

Percent Self-Reporting Employment When Surveyed	29%
Percent With Employment Reported by Employers to the Employment Security Department the Third Quarter after Leaving Program	27%
Median Quarterly Hours Worked, of Those Working	149
Mean Quarterly Hours Worked, of Those Working	175
Percent Employed Full-Time of Those Working (averaging 30 or more hours/week)	9%
Median Quarterly Earnings of Those Working	\$808
Median Hourly Wage of Those Working	\$5.60

<sup>51</sup> All wages and earnings are stated in first quarter 1997 dollars.

Typical earnings for this group are far too low to support even a one-person household. However, given their youth and continuing education, one should expect short-term earnings to be low and not an effective gauge of program performance.

### **Areas for Improvement**

The JTPA Title II-B program serves disadvantaged youth with primarily two kinds of services during the summer: employment for approximately eight weeks and remedial education. Given this population and the limited duration of service, it is not reasonable to expect the program to have major impacts on subsequent employment and earnings. Besides providing gainful work, a major goal of the program is to encourage youth to continue in school.

The majority of participants were continuing their education when surveyed three to five months after leaving the program. Among those who were employed, the large majority said that their summer experience was useful in their job. The large majority of participants also said they were very satisfied with the program.

There is some evidence, however, that the connection between the summer remedial education activities and the regular school year could be stronger. Less than 40 percent of the continuing students said that the program was useful to their current school work. There might also be a better connection during the summer between learning at work and in the classroom. About half of the participants did not recall engaging in work experiences that were either coordinated or combined with classroom training.

# Potential Training Participants

This section examines the employment and training experiences of individuals who would most likely benefit from workforce training and education, but who were not enrolled in one of the 1995–96 programs. Barriers that keep individuals from obtaining the training and employment they need are identified in this section.

We selected a sample of potential participants from individuals who registered with the Washington State Employment Service during the 1995 program year (July 1, 1995, through June 30, 1996). The majority of these individuals were recently unemployed and actively seeking new employment opportunities; they therefore represent a pool of individuals who could potentially benefit from additional workforce training and education. This sample of potential participants is also a group for which the state maintains sufficient data for analysis. We limited our analysis to those 16 to 60 years of age who did not have a bachelor degree. In all, 193 such individuals participated in a telephone survey conducted during the fall of 1997.

<sup>52</sup> This population is different than that used in the previous outcomes evaluation.

## Potential Participant Characteristics

The selected group of potential participants was very similar to the state's adult population in terms of age, gender, race ethnicity, and education (except the exclusion of those with a bachelor degree). Twenty-three percent were from 16 to 24 years of age. Sixteen percent of the participants were people of color. Fifty-three percent were male. Eight percent did not have a high school diploma or GED, and 32 percent of the participants had no postsecondary education.<sup>52</sup>

When surveyed during the fall of 1997, one-quarter of the individuals reported they were unemployed, and 19 percent said they received some form of public assistance during the previous 12 months (Aid to Families with Dependent Children and/or Food Stamps).

### *Potential Participant Characteristics*

#### Race/Ethnicity

**White ..... 84%**

**Hispanic ..... 5%**

**Asian/Pacific  
Islander ..... 4%**

**Native  
American ..... 4%**

**African-  
American ..... 2%**

## Barriers to Employment and the Need for Training

We asked those actively seeking work at the time of the survey why they thought they had not been able to find a job. The responses suggest that many of these individuals were unemployed because of the lack of economic activity in their area. The leading response was a lack of jobs available in their geographic area, followed by a shortage of job opportunities in their line of work, and the jobs they were eligible for did not pay livable wages. Approximately one-third believed their job search was impaired because they did not possess the skills needed to qualify for the jobs available in their area.

The survey also asked this group about their desire for additional training. Seventy-six percent responded that they would like additional training. Of those, 89 percent indicated they would like additional computer training, 56 percent would like more training in math and writing skills, and 46 percent wanted specialized training in the operation of a particular type of machinery or equipment.

## Barriers to Training

All potential participants (not just those seeking work) were asked why they did not enter a training program to get job or basic skills. They were asked separately about their interest in community and technical college programs and in other types of public training programs. Overall, the survey responses suggest that time conflicts and lack of information about financial assistance are often reasons that

potential participants do not enroll in community and technical college programs. Among those who considered attending a community or technical college, 73 percent said they did not enroll because they were working, and 66 percent did not because they were too busy. Forty-four percent mentioned program cost.

Potential participants were less likely to cite other barriers as a reason they had considered but decided not to attend either a technical or community college. Thirty-two percent said classes were offered at inconvenient times, and 17 percent cited a shortage of child care assistance. Only 7 percent did not know of a community or technical college in their area.

Potential participants were also asked about barriers that might prevent them from enrolling in other public training programs, such as JTPA programs. A substantial proportion (43 percent) did not know whether they were eligible.

## Areas for Improvement

To link more potential participants to a training program, the survey results suggest the state could do more to provide employment service registrants with information about training opportunities. Individuals could use information about their eligibility for other types of public training programs and about financial assistance to attend a community or technical college. Our previous outcomes evaluation came to the same conclusion. In addition, community and technical colleges could do more to schedule classes at times convenient to people with full-time jobs.

# Employer-Provided Training

Training that employers offer their own employees is a major part of training that occurs in the state (and is defined in statute as part of the state training system). The Workforce Training and Education Coordinating Board estimates employer expenditures on training are roughly equivalent to the amount of public expenditures on workforce development. This section analyzes training that employers provide to their own employees.

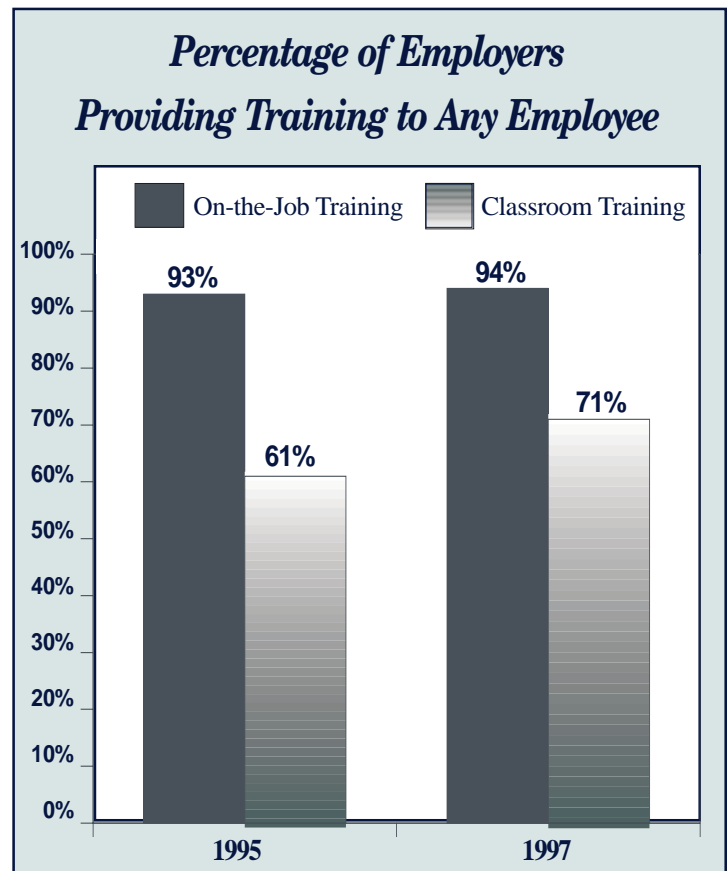
The 1997 employer survey asked firms, among other things, about their employee training. Approximately 1,000 employers responded. The responses reported here have been weighted to reflect actual distribution of industries in the state.

According to survey results, most Washington employers provided or paid for at least some type of training for their employees at what are increasing rates from previous years. However, they seldom provided basic skills instruction to employees and provided classroom training to far fewer production or service workers than to managerial employees.

Almost all employers (94 percent) said they provided at least some on-the-job training to some employees within the last 12 months, and most provided or paid for some classroom training for at least some of their employees. Seventy-one percent said they provided at least four hours of classroom training in the last

twelve months. This was an 10 point increase from the percentage who responded similarly in 1995. (See Figure 48.) (The survey did not include a question regarding general tuition reimbursement programs offered to employees who attended college. In 1995, we found about one-third of employers offer tuition reimbursement.)

FIGURE 48



To further measure the extent that employers provide training, we asked employers whether the percentage of employees who received classroom training had increased in the last three years. Fifty-three percent said it had increased, 44 percent said had it remained the same, and only 3 percent reported it had declined in the last three years.

Employers were also asked to elaborate on their reasons for increasing classroom training, if they had. The following shows the percentage of employers citing each factor:

1. To promote the personal or career development of employees ..... 80%
2. To improve the quality of output ..... 74%
3. Due to changes in technology ... 72%
4. To help develop more positive attitudes and work habits ..... 72%
5. To improve worker productivity ..... 71%
6. Due to changes in products or services provided by the firm ... 67%
7. New hires did not have necessary skills ..... 66%
8. To improve the morale of employees ..... 63%

9. Due to changes in the organization of work ..... 58%
10. To develop a more flexible and versatile workforce ..... 58%
11. To keep up with competitors at home ..... 57%

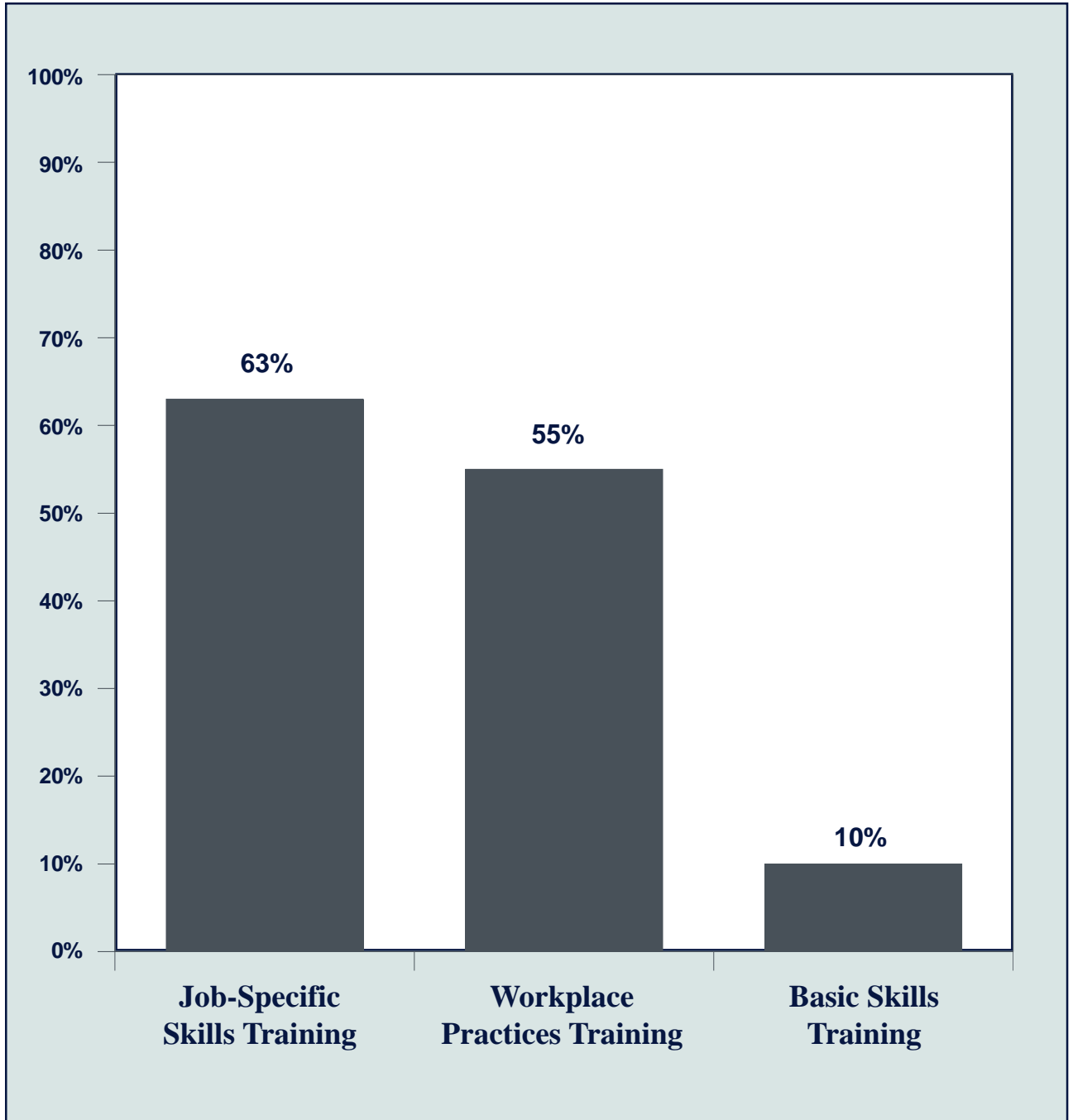
Thirty-six percent cited legal requirements. Only 5 percent cited foreign competition as a reason they had increased classroom training for their employees.

Employers most frequently provided training in job-specific skills (training to upgrade or to extend employee skills or to qualify them for a specific occupation). Sixty-three percent of employers said they provided employees with at least four hours of classroom training in job-specific skills. Employers also frequently provided training in workplace skills (for example: diversity, sexual harassment, safety and health, and teamwork training). Fifty-five percent provided at least some classroom training in workplace practices.

In contrast, employers reported they seldom provided basic skills instruction to their employees. Only 10 percent indicated they provided 4 hours of basic skills classroom instruction to any of their employees in the last 12 months. This lack of employer-provided basic skills instruction was also found by the 1995 employer survey. (See Figure 49.)

*Percentage of Employers  
Providing Training to Any Employee*  
(at least 4 hours during the last 12 months)

FIGURE 49



The 1997 employer survey found, as have previous state and national surveys, that employers are much more likely to provide training to managerial employees than to nonmanagerial employees. The survey asked employers to classify into job types those employees who received at least four hours of classroom training in the last four months. According to employer responses, 59 percent of managerial employees had received classroom training. In contrast, 33 percent of clerical and administrative support employees had received classroom training, and only 14 and 13 percent of production and service workers, respectively, had received classroom training. (See Figure 50.)

### **Experience With Training Providers for Current Workers**

When employers wanted to improve the skills of their employees, most did not turn to the public sector to provide training. More frequently, they used their own personnel or private training vendors to train employees. Those who did use public community or technical colleges, however, indicated satisfaction with the training their employees received.

Among the 63 percent of employers who provided classroom training in job-specific skills in the last 12 months, 69 percent said they used their own firm's personnel to provide training, 52 percent used a private training contractor, and 41 percent said they

used an industry or trade association. Only 14 percent used a community or technical college, 11 percent a private career school, and 6 percent a four-year college or university. (See Figure 51.)

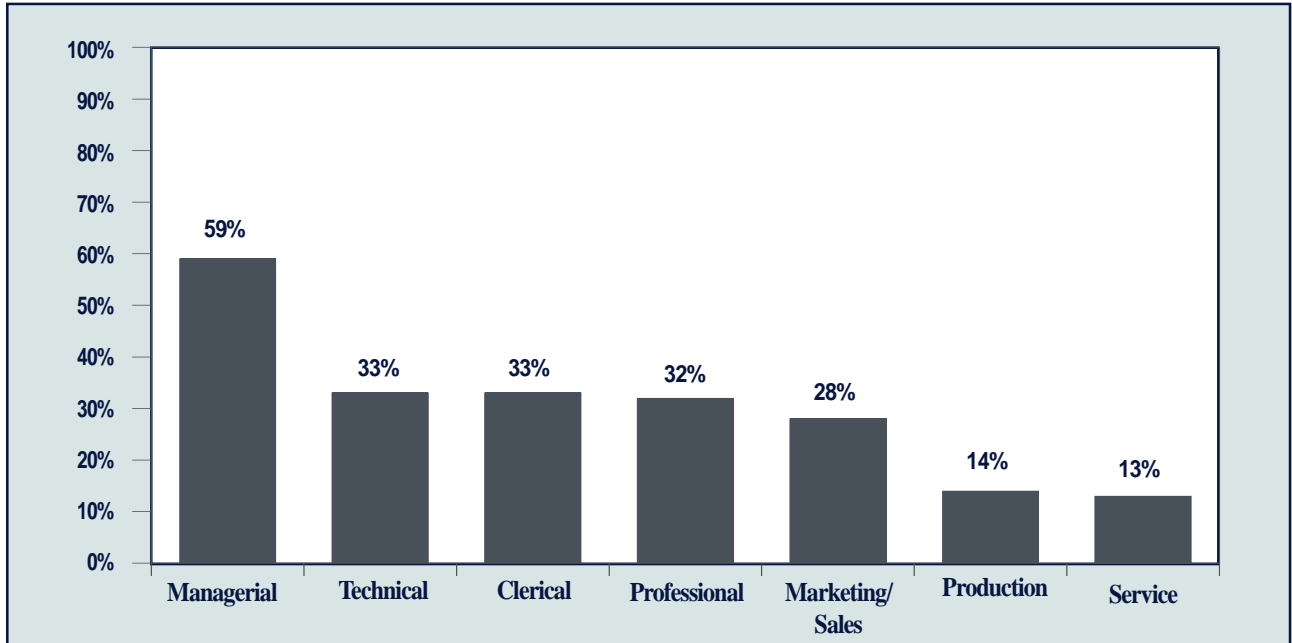
Among the 56 percent of employers who provided classroom training in general workplace practices in the last 12 months, 77 percent reported using their own firm's personnel to provide training, 61 percent used a private training contractor, and 52 percent said they used an industry or trade association. Only 13 percent used a community or technical college, 9 percent a private career school, and 4 percent a four-year college or university.

Among the 10 percent of employers who provided classroom training in basic skills (reading, writing, and math) in the last 12 months, 61 percent used a private training contractor, 59 percent their own personnel, and 27 percent an industry or trade association. Twelve percent used a community or technical college for their training needs.

Employers were generally satisfied with their own personnel and the vendors they chose to train their employees. Among firms who have used their own personnel to provide job-specific training, 54 percent reported being very satisfied with the results, and 45 percent were somewhat satisfied. Among firms who used private training vendors to meet their needs, 61 percent reported being very satisfied and 36 percent somewhat satisfied with the results.

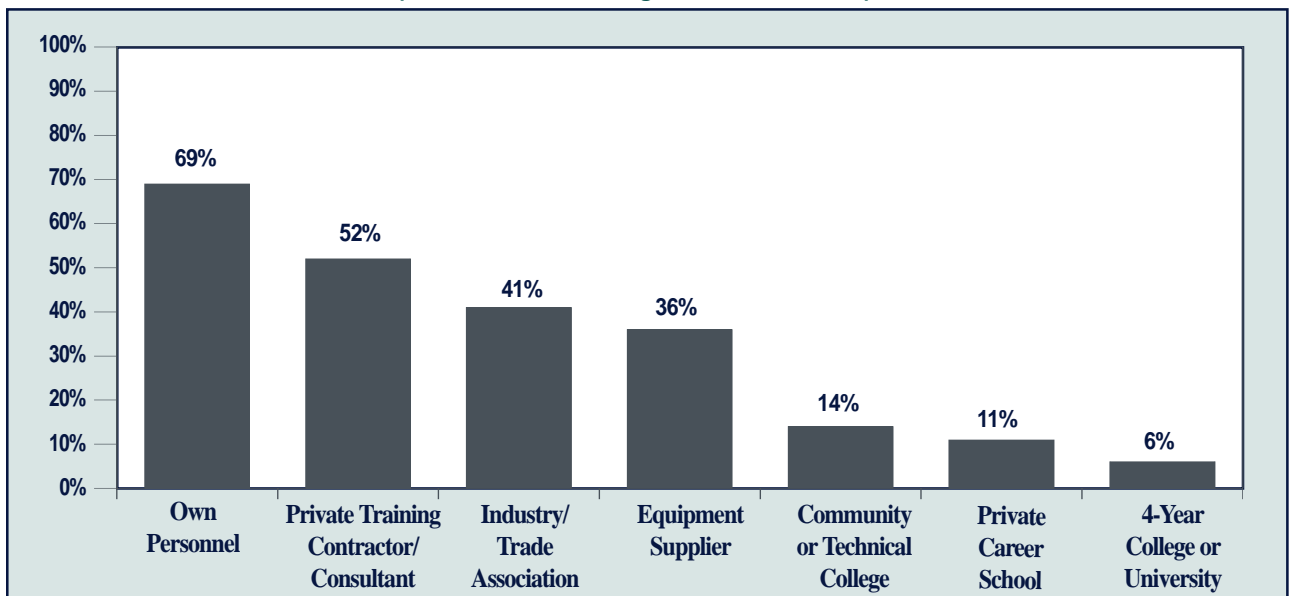
### *Percentage of Employees Who Received Employer-Provided Classroom Training*

FIGURE 50 (mean employer estimate: at least 4 hours in the last 12 months)



### *Percentage of Employers Who Used Providers of Job-Specific Classroom Training*

FIGURE 51 (at least 4 hours during the last 12 months)



Among those employers who used industry or trade associations for employee training, 62 percent reported being very satisfied and 37 percent somewhat satisfied with the results of the training.

Most firms who used a community or technical college to train their current workers also reported that they were very satisfied with the training their employees received. Among firms who used a community or technical college for job-specific training, 62 percent were very satisfied and 36 percent were somewhat satisfied with the training. Among firms who used a community or technical college for general workplace skills training, 73 percent reported being very satisfied and 21 percent were somewhat satisfied with the results. And, among firms who used a community or technical college for basic skills instruction, 44 percent were very satisfied and 55 percent somewhat satisfied.

The survey asked employers who had used a community or technical college to rate the colleges' responsiveness to their particular needs, the amount of skill their employees had gained, the timeliness of the training, the cost of the training, the convenience of the hours, the quality of the equipment, the quality of the facilities, the technical competence of the instructors, and the administrative simplicity (red tape). In each area, the vast majority of employers rated the college training as either very good or good. (See Figure 52.)

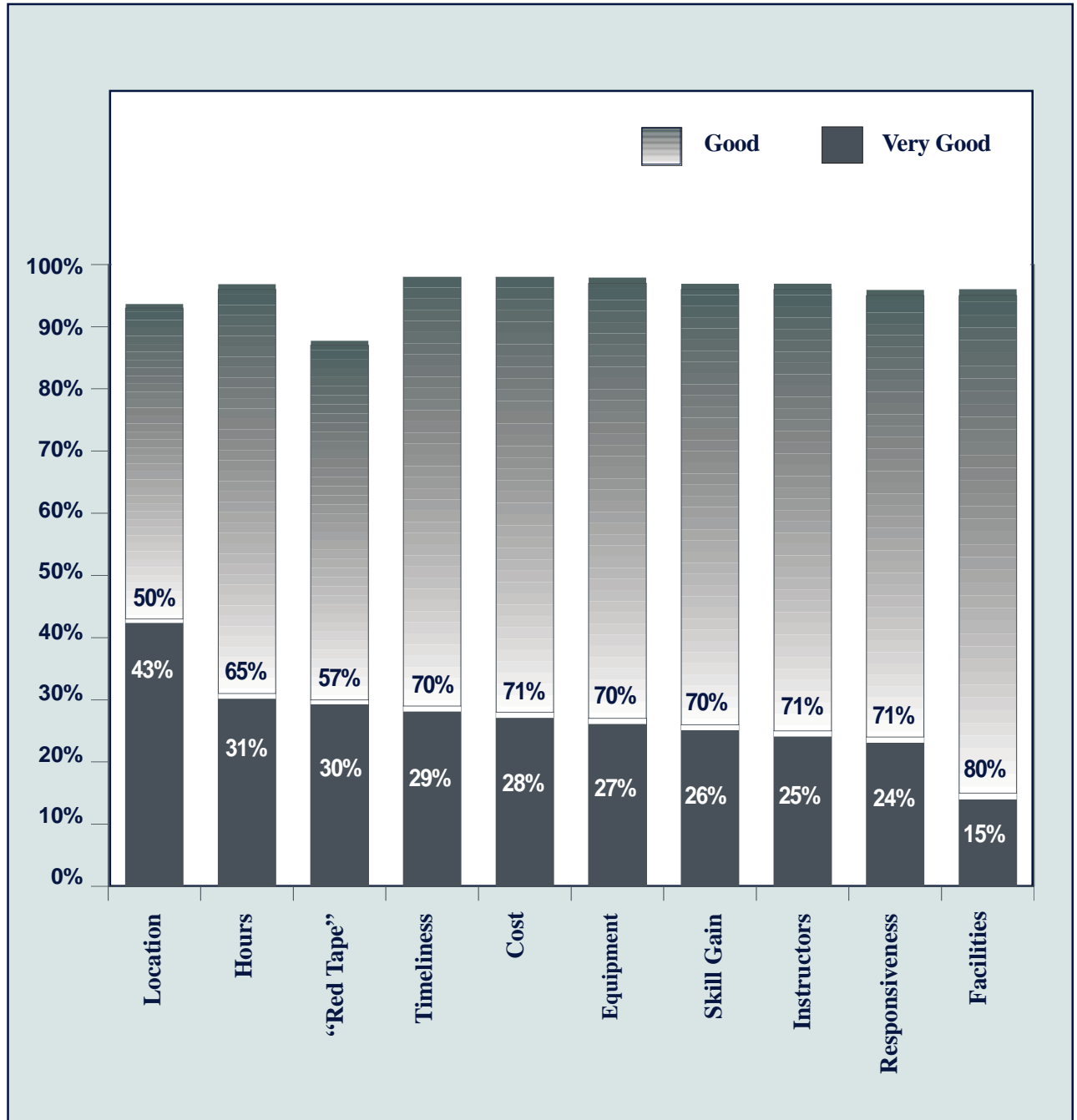
The employer ratings of college responsiveness to their particular needs were typical of their ratings in general. Twenty-four percent of employers rated the college's responsiveness as very good, 71 percent said the responsiveness was good, and just 5 percent said the responsiveness was poor. Only a small amount of variation existed across different training aspects. The feature that employers most frequently rated highly was the convenient location of colleges. Forty-three percent of employers said the location was very good. Employers were less impressed by college facilities. Fifteen percent of employers said college facilities were very good and, 80 percent said they were good. Thirty percent of employers said that the administrative simplicity in making the arrangements for college training, or the amount of "red tape," was very good and 57 percent said it was good.

The survey asked employers who used a community or technical college why they selected a college as their trainer. (Employers were asked to cite as many reasons as applied.) Eighty-one percent cited convenient location, 75 percent said the cost-effective value for the money, 66 percent cited the quality of instruction, and 65 percent said they selected a community or technical college because the college customized the training to meet employers' needs.

## *Employer Ratings of Community or Technical College Training for Current Employees*

(mean employer response among employers who used a college)

FIGURE 52



Finally, the survey asked employers who never had used a community or technical college for employee training what their main reasons for not doing so were. Employers responded most frequently they did not need community or technical college training because they used their own personnel. Sixty-one percent of employers said that community or technical colleges did not offer the type of training their employees needed, 38 percent said the cost would be too high, and 31 percent said they were not aware of what training colleges offer.

would be more useful to employers if they offered more of the types of training that employers need and made more employers aware of this training. Finally, the anticipated cost of community and technical college training is a deterrent to some employers.

### Areas for Improvement

Our findings suggest certain areas for improvement based on Washington State employer survey responses. While many employers do provide or pay for training for their own employees, the average employer did not provide even four hours of classroom training in the past 12 months to the vast majority of production or service employees. Instead, as we have seen, managerial employees are more likely to receive training from their employer. Employers also seldom provide basic skills instruction to their employees.

Employers who used community or technical colleges to train their current workers reported that they were satisfied with the training their employees received there. Very few employers, however, turned to the public system to meet their training needs. Colleges

**Workforce Training  
Results — 1998**

*Appendix*

## Workforce Training Results—1998 Customer Satisfaction Survey

The Workforce Training and Education Coordinating Board is committed to high quality customer satisfaction and continuous improvement. You can help us meet our commitment by completing this form, detaching it, and mailing it in. Please circle the words that best answer the following questions. In the space provided please elaborate on your response, if appropriate. Alternatively, you may access a form on our website and complete it electronically.

1. How <b>useful</b> are the ideas presented in this report?	Not Useful	Somewhat Useful	Very Useful
2. How <b>clear</b> are the ideas presented in this report?	Not Clear	Somewhat Clear	Very Clear
3. How <b>useful</b> are the recommendations?	Not Useful	Somewhat Useful	Very Useful
4. How <b>clear</b> are the recommendations?	Not Clear	Somewhat Clear	Very Clear
5. How complete is the information?	Not Complete	Somewhat Complete	Very Complete
6. How accurate is the information?	Not Accurate	Somewhat Accurate	Very Accurate
7. How is the information presented?	Not Enough Detail	Right Amount Detail	Too Much Detail
8. How is the length of the document?	Too Short	About Right	Too Long
9. Are there enough charts and graphs mixed in with the text?	Not Enough Charts	Good Balance	Too Many Charts
10. Would you like to see this report on the Internet? Yes ____ No ____			
11. Do you want additional copies of this report? Yes ____ Quantity _____ No ____ (If yes, please provide us with your name and address on the next page.)			
12. How did you expect to use this report? How have you used this report?			
13. How can this report be made more useful in future editions? What additional information would you like to see in subsequent reports?			

## Please Tell Us About Yourself

<b>JOB TITLE</b>	<b>SECTOR</b> Public ____ Private ____ Nonprofit ____	<b>YOUR ZIP CODE</b>
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Does your organization provide training services to clients? Yes \_\_\_\_ No \_\_\_\_

Would you like to be contacted about future WTECB initiatives in this field? Yes \_\_\_\_ No \_\_\_\_

If we have any questions about what you have written here, may we contact you? Yes \_\_\_\_ No \_\_\_\_  
(If you answered “yes” to this question or question #11 on previous page, please fill out the following.)

<b>NAME</b>	<b>ADDRESS</b>	
<b>TELEPHONE #</b>	<b>FAX#</b>	<b>EMAIL ADDRESS</b>